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M E M O

Date: April 27, 2020

To: **Shannon George**
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From: **James A. Reyff**
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RE: **1260 E. Santa Clara Street, San José (Empire Lumber)** I&R Job#: 15-235

SUBJECT: **Updated Project Criteria Air Pollutant & GHG Emissions Modeling**

Illingworth & Rodkin, Inc. prepared the air quality assessment for the 1260 E. Santa Clara Street mixed-use project, otherwise known as Empire Lumber,[1] which addressed the air quality impacts caused by the construction and operation of the proposed residential and retail uses on the 2.77-acre site in San José, California. The project land use densities and site plan have since been revised. This memo addresses any changes to the air quality impacts identified in the original report due to the updated project.

This assessment evaluated the air quality impacts in terms of air pollutant and greenhouse gas (GHG) emissions from construction and operation of the project. No update to the health risk assessment was conducted for the updated project based on the assumption that the original project adequately addressed this issue and that the project changes were not anticipated to change conclusions or mitigation measures identified in the health risk assessment.

Project Description

The updated project proposes to demolish the existing auto sales shop and construct a seven-story mixed-use building. The building would have 408 residential units, 60,331 square feet (sf) of retail use, and a one level of below-grade and two levels of above-grade parking garage with 534 parking spaces.

[1] Illingworth & Rodkin, Inc. 2016. *1260 E. Santa Clara Street, Mixed-Use Development Project, Draft Air Quality Assessment*. July 20.

Emissions Modeling

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 and CARB's latest EMission FACtors (EMFAC2017) model was used to estimate emissions from construction and operation of the site assuming full build-out of the project. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The model output from CalEEMod is included as *Attachment 1*.

Construction period emissions

CalEEMod provided annual emissions for construction and estimates emissions for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. A construction build-out scenario, including equipment list and schedule, was based on the applicant provided construction data from the original project with an updated schedule to begin in 2021. The proposed project land uses and demolition/earthwork volumes were entered into CalEEMod as follow:

- 408 dwelling units entered as "Apartment Mid Rise" on 2.77 acres,
- 60,331-sf entered as "Strip Mall",
- 534 spaces entered as "Enclosed Parking with Elevator",
- 18.940-sf of existing building demolition and 4,000 tons of pavement demolition and hauling,
- 6,000 cubic yards (cy) of soil import and 60,000-cy of soil export during site preparation and 52,800-cy of soil export during grading, and
- 30,000-cy of cement hauling during building construction.

Construction was assumed to begin April 2021 and last 25 months. There were an estimated 257 construction workdays. Average daily emissions were computed by dividing the total construction emissions by the number of construction days. Table 1 shows average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 1, predicted the construction period emissions would not exceed the BAAQMD significance thresholds.

Table 1. Construction Period Emissions

Scenario	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total construction emissions (from CalEEMod)	3.3 tons	0.8 tons	<0.1 tons	<0.1 tons
Total construction emissions (from EMFAC2017)	2.0 tons	2.4 tons	0.2 tons	0.1 tons
Total Construction Emissions (tons)	5.3 tons	3.2 tons	0.2 tons	0.1 tons
Average daily emissions (pounds)[1]	41.4 lbs./day	24.6 lbs./day	1.9 lbs./day	1.0 lbs./day
BAAQMD Thresholds (pounds per day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	No	No	No	No

Notes: [1]Assumes 257 workdays.

Operational Period Emissions

Operational air emissions from the project would be generated primarily from autos driven by future residents, employees and guests. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was also used to estimate emissions from operation of the proposed project assuming full build-out.

CalEEMod defaults to using the 2014 version of CARB's EMission FACtors (EMFAC) model to estimate operational emissions. EMFAC uses emissions rates with vehicle activity data from all motor vehicles, passenger cars to heavy-duty trucks, operating on highways, freeways, and local roads in California. The latest version of CARB's EMFAC model is EMFAC2017. EMFAC2017 became available for use in March 2018 and approved by the EPA in August 2019. It includes the latest data on California's car and truck fleets and travel activity. When compared to EMFAC2014, EMFAC2017 uses new forecasting methods for developing vehicle age distributions and estimating vehicle miles traveled. It also reflects the emissions benefits of recent rulemakings such as Federal Phase 2 GHG Standards. The most recent EMFAC model also includes updates to truck emission factors based on the latest test data. More details about the updates in emissions calculation methodologies and data are available in the EMFAC2017 Technical Support Document.[2]

CalEEMod's annual vehicle emissions factors and vehicle fleet mix were updated to EMFAC2017 for the anticipated operations year of 2024. EMFAC2017 was run using CARB's web data base in emission rates mode for Santa Clara County. "Annual" was selected for the season and 2007 vehicle classes were selected to be consistent with CalEEMod vehicle classes. Vehicle model years were aggregated as were speeds, but fuel-specific factors were selected. EMFAC2017 factors were then post-processed to develop the CalEEMod factors using the methodologies outlined in Section 5.2 of Appendix A of the CalEEMod model's technical documentation.[3] EMFAC2017 worksheets are included as *Attachment 2*.

Land Uses

The project land uses were entered into CalEEMod as described above for the construction period modeling.

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest the project could possibly be constructed and begin operating would be 2024. Emissions associated with build-out later than 2024 would be lower.

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[2] See CARB 2018: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-modeling-tools-emfac, accessed April 20, 2020.
[3] BREEZE Software for CAPCOA, *Appendix A, Calculation Details for CalEEMod Section 5.2,* October 2017. Web: https://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6

Trip Generation Rates

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model. The daily trip rates for the residential and retail uses accounted for the residential-retail internal reduction, location-based reduction, and VMT reduction.[4] For each land use type, the forecasted daily trip rate with trip reductions applied was divided by the quantity of that land use to identify the weekday daily trip rate. The Saturday and Sunday trip rates were assumed to be the weekday rate adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate. The default trip lengths and trip types specified by CalEEMod were used.

Energy

CalEEMod defaults for energy use were used, which include the 2016 Title 24 Building Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The electricity produced emission rate was modified in CalEEMod. Historically, the project site has received electricity from PG&E. CalEEMod has a default emission factor of 641.3 pounds of CO_2 per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. PG&E published in 2019 emissions rates for 2010 through 2017, which showed the emission rate for delivered electricity had been reduced to 210 pounds CO2 per megawatt of electricity delivered in the year 2017.[5] The rate was adjusted to account for PG&E's projected 2020 CO_2 intensity rate. This 2020 rate is based, in part, on the requirement of a renewable energy portfolio standard of 33 percent by the year 2020. The derived 2020 rate for PG&E was estimated at 290 pounds of CO_2 per megawatt of electricity delivered.[6] However, the project would use electricity supplied by San Jose Clean Energy (SJCE) that will be 100-percent carbon free by 2021 before the project becomes operational.[7]

Other Inputs

Default model assumptions for emissions associated with solid waste generation use were applied to the project. Water/wastewater use were changed to 100% aerobic conditions to represent wastewater treatment plant conditions. All hearths were assumed to be powered by gas.

Project Operational Emissions

As shown in Table 2, operational emissions would not exceed the BAAQMD significance thresholds.

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[4] Hexagon Transportation Consultants, Inc., 2020, *1510 S. De Anza Boulevard Hotel Draft Transportation Analysis.* February.
[5] PG&E, 2019. *Corporate Responsibility and Sustainability Report*. Web: http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf
[6] Pacific Gas & Electric, 2015. *Greenhouse Gas Emission Factors: Guidance for PG&E Customers*. November. https://www.ca-ilg.org/sites/main/files/file-attachments/ghg_emission_factor_guidance.pdf
[7] Kerrie Romanow and Rosalynn Hughey, 2019. *Building reach Code for New Construction Memorandum*. August. Web: https://sanjose.legistar.com/LegislationDetail.aspx?ID=4090015&GUID=278596A7-1A2B-4248-B794-7A34E2279E85

Table 2. Operational Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
2023 Project Operational Emissions (*tons/year*)	3.3 tons	1.7 tons	2.2 tons	0.6 tons
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	No	No	No	No
2023 Project Operational Emissions (*lbs/day*)[1]	18.1 lbs.	9.2 lbs.	12.2 lbs.	3.5 lbs.
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	No	No	No	No

Notes: [1] Assumes 365-day operation.

Greenhouse Gas Emissions

The original air quality report for the proposed project did not include an GHG assessment. A GHG assessment for the updated project was conducted to quantify GHG emissions associated with the updated project.

Setting

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO_2 being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO_2 equivalents (CO_2e).

An expanding body of scientific research supports the theory that global climate change is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater

intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

Recent Regulatory Actions

Assembly Bill 32 (AB 32), California Global Warming Solutions Act (2006)

AB 32, the Global Warming Solutions Act of 2006, codified the State's GHG emissions target by directing CARB to reduce the State's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission (CPUC), and Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual (BAU) is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 million metric tons (MMT) of CO_2e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO_2e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO_2e. Thus, an estimated reduction of 80 MMT of CO_2e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

Senate Bill 375, California's Regional Transportation and Land Use Planning Efforts (2008)

California enacted legislation (SB 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 provides incentives for local governments and applicants to implement new conscientiously planned growth patterns. This includes incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows applicants to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be

achieved from the transportation sector for 2020 and 2035. CARB works with the metropolitan planning organizations (e.g. Association of Bay Area Governments [ABAG] and Metropolitan Transportation Commission [MTC]) to align their regional transportation, housing, and land use plans to reduce vehicle miles traveled and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the Bay Area.

SB 350 Renewable Portfolio Standards

In September 2015, the California Legislature passed SB 350, which increases the states Renewables Portfolio Standard (RPS) for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Executive Order EO-B-30-15 (2015) and SB 32 GHG Reduction Targets

In April 2015, Governor Brown signed Executive Order which extended the goals of AB 32, setting a greenhouse gas emissions target at 40 percent of 1990 levels by 2030. On September 8, 2016, Governor Brown signed SB 32, which legislatively established the GHG reduction target of 40 percent of 1990 levels by 2030. In November 2017, CARB issued *California's 2017 Climate Change Scoping Plan*. While the State is on track to exceed the AB 32 scoping plan 2020 targets, this plan is an update to reflect the enacted SB 32 reduction target.

SB 32 was passed in 2016, which codified a 2030 GHG emissions reduction target of 40 percent below 1990 levels. CARB is currently working on a second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32. The proposed Scoping Plan Update was published on January 20, 2017 as directed by SB 32 companion legislation AB 197. The mid-term 2030 target is considered critical by CARB on the path to obtaining an even deeper GHG emissions target of 80 percent below 1990 levels by 2050, as directed in Executive Order S-3-05. The Scoping Plan outlines the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure, providing a blueprint to continue driving down GHG emissions and obtain the statewide goals.

The new Scoping Plan establishes a strategy that will reduce GHG emissions in California to meet the 2030 target (note that the AB 32 Scoping Plan only addressed 2020 targets and a long-term goal). Key features of this plan are:

- Cap and Trade program places a firm limit on 80 percent of the State's emissions;
- Achieving a 50-percent Renewable Portfolio Standard by 2030 (currently at about 29 percent statewide);
- Increase energy efficiency in existing buildings;
- Develop fuels with an 18-percent reduction in carbon intensity;
- Develop more high-density, transit-oriented housing;
- Develop walkable and bikeable communities;
- Greatly increase the number of electric vehicles on the road and reduce oil demand in half;
- Increase zero-emissions transit so that 100 percent of new buses are zero emissions;

- Reduce freight-related emissions by transitioning to zero emissions where feasible and near-zero emissions with renewable fuels everywhere else; and
- Reduce "super pollutants" by reducing methane and hydrofluorocarbons or HFCs by 40 percent.

In the updated Scoping Plan, CARB recommends statewide targets of no more than 6 metric tons CO_2e per capita (statewide) by 2030 and no more than 2 metric tons CO_2e per capita by 2050. The statewide per capita targets account for all emissions sectors in the State, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term State emissions reduction goal of 80 percent below 1990 levels by 2050.

GHG Emissions

The U.S. EPA reported that in 2017, total gross nationwide GHG emissions were 6,457 MMT. These emissions were lower than peak levels of 7,370 MMT that were emitted in 2008. Relative to 1990 levels, these emissions were CARB updates the statewide GHG emission inventory on an annual basis where the latest inventory includes 2000 through 2017 emissions.[8] In 2017, GHG emissions from statewide emitting activities were 424 MMT. The 2017 emissions have decreased by 14 percent since peak levels in 2004 and are 7 MMT below the 1990 emissions level and the State's 2020 GHG limit. Per capita GHG emissions in California have dropped from a 2001 peak of 14.1 MT per person to 10.7 MT per person in 2017. The most recent Bay Area emission inventory was completed for the year 2011.[9] GHG emission in were 87 MMT. As a point of comparison, statewide emissions were about 444 MMT in 2011.

Climate Smart San José

Climate Smart San José is a plan to reduce air pollution, save water, and create a stronger and healthier community. The City approved goals and milestones in February 2018 to ensure the City can substantially reduce GHG emissions through reaching the following goals and milestones:

- All new residential buildings will be Zero Net Carbon Emissions (ZNE) by 2020 and all new commercial buildings will be ZNE by 2030 (Note that ZNE buildings would be all electric with a carbon-free electricity source).
- San Jose Clean Energy (SJCE) will provide 100-percent carbon-free base power by 2021.
- One gigawatt of solar power will be installed in San Jose by 2040.
- 61 percent of passenger vehicles will be powered by electricity by 2030.

The California Energy Commission (CEC) updates the California Building Energy Efficiency Standards every three years, in alignment with the California Code of regulations. Title 24 Parts 6 and 11 of the California Building Energy Efficiency Standards and the California Green Building Standards Code (CALGreen) address the need for regulations to improve energy efficiency and

[8] CARB. 2019. *2019 Edition, California Greenhouse Gas Emission Inventory: 2000 – 2017*. Available at https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf accessed on Nov. 26, 2019.
[9] BAAQMD. 2015. *Bay Area Emissions Inventory Summary Report: Greenhouse Gases Base Year 2011*. January. Available at http://www.baaqmd.gov/~/media/files/planning-and-research/emission-inventory/by2011_ghgsummary.pdf accessed Nov. 26, 2019.

combat climate change. The 2019 CAL Green standards include substantial changes intended to increase the energy efficiency of buildings. For example, the code encourages the installation of solar and heat pump water heaters in low-rise residential buildings. The 2019 California Code went before City Council in October 2019 for approval, with an effective date of January 1, 2020. As part of this action, the City adopted a "reach code" that requires development projects to exceed the minimum Building Energy Efficiency requirements.[10] The City's reach code applies only to new residential and non-residential construction in San José. It incentivizes all-electric construction, requires increased energy efficiency and electrification-readiness for those choosing to maintain the presence of natural gas. The code requires that non-residential construction include solar readiness. It also requires additional EV charging readiness and/or electric vehicle service equipment (EVSE) installation for all development types.

BAAQMD Significance Thresholds

The BAAQMD's CEQA Air Quality Guidelines recommended a GHG threshold of 1,100 metric tons or 4.6 metric tons (MT) per capita. These thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. Development of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate. Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a "Substantial Progress" efficiency metric of 2.6 MT CO_2e/year/service population and a bright-line threshold of 660 MT CO_2e/year based on the GHG reduction goals of EO B-30-15. The service population metric of 2.6 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels.[11] The 2030 bright-line threshold is a 40 percent reduction of the 2020 1,100 MT CO_2e/year threshold.

Greenhouse Gas Assessment

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

CalEEMod Modeling

CalEEMod was used to predict GHG emissions from operation of the site assuming full build-out of the project. The project land use types and size and other project-specific information were input to the model, as described above within the operational period emissions. CalEEMod output is included in *Attachment 1*.

[10] City of San Jose Transportation and Environmental Committee, *Building Reach Code for New Construction Memorandum,* August 2019.
[11] Association of Environmental Professionals, 2016. *Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*. April.

Service Population Emissions

The project service population efficiency rate is based on the number of future residents and future full-time employees. For this project, the number of future residents was estimated by multiplying the total number of units (e.g. 408 units) by the persons per household rate for the City of San Jose found in the California Department of Finance Population and Housing Estimate report.[12] Using the 3.2 person per household 2019 rate, the number of futures residents is estimated to be 1,306 residents. The number of workers was estimated using a rate of approximately one retail worker per 650-sf of large retail space.[13] Based on the project's proposed 60,331-sf for retail use, there would be 93 future full-time employees. The estimated total service population would be 1,399 individuals.

Construction Emissions

GHG emissions associated with construction were computed to be 2,016 MT of CO_2e for the total construction period. These are the emissions from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable.

Operational Emissions

The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of the fully-developed site under the proposed project. As shown in Table 3, the annual emissions resulting from operation of the proposed project are predicted to be 2,450 MT of CO_2e in 2024 and 2,157 MT of CO_2e in 2030. The service population emission for the year 2024 and 2030 are predicted to be 1.8 and 1.5 MT/CO_{2e}/year/service population, respectively.

To be considered significant, the project must exceed both the GHG significance threshold in metric tons per year and the service population significance threshold in the opening and future year. Note that if the project exceeds in the opening but not the future year, then it is still considered a significant impact. Emissions from both years must be below at least one of the thresholds.

The project would exceed the annual emissions bright-line threshold of 660 MT CO_2e/year in the opening and future years. However, the 2024 and 2030 emissions would not exceed the per capita threshold of 2.6 MT of CO_2e/year/service population.

[12] State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2019*. Sacramento, California, May 2019.
[13] Strategic Economics. 2016. *San* José *Market Overview and Employment Lands Analysis*. January 20.

Table 3. Annual Project GHG Emissions (CO_2e) in Metric Tons and Per Capita

Source Category	Proposed Project in 2024	Proposed Project in 2030
Area	22	22
Energy Consumption	197	197
Mobile	1,962	1,684
Solid Waste Generation	126	126
Water Usage	50	50
Total (MT CO_{2e}/year)	**2,357 MT CO_{2e}/year**	**2,079 MT CO_{2e}/year**
Significance Threshold	***660 MT CO_{2e}/year***	
Service Population Emissions (MT CO_{2e}/year/service population)	1.7	1.5
Significance Threshold	***2.6 in 2030***	
Exceeds both thresholds?	*No*	*No*

The impact of GHG emissions was addressed in the *Envisions San José 2040 General Plan* Draft Program EIR. The City of San José concluded that the build-out of the 2040 General Plan would have significant and unavoidable GHG emissions beyond 2020.[14] Therefore, this project would not contribute or result in a new GHG impact that has not already been identified.

Supporting Documentation

Attachment 1 includes the CalEEMod output for project construction and operational criteria air pollutant and GHG emissions. The 2030 project operational outputs are also included in this attachment. Also included are any modeling assumptions.

Attachment 2 includes the EMFAC2017 worksheets used in the CalEEMod modeling.

[14] City of San Jose, 2011. "3.15.6 Mitigation and Avoidance Measures for Greenhouse Gas Emission Impacts", *Draft Program Environmental Impact Report for the Envisions San José 2040 General Plan*. June. Web: https://www.sanjoseca.gov/home/showdocument?id=22041

Attachment 1: CalEEMod Modeling Inputs and Outputs

1260 E Santa Clara Mixed-Use Development VMT Trip Generation Estimates

Land Use	ITE Land Use Code	Location	% of Vehicle Mode Share	VMT[3] Existing	VMT[3] Project	% Reduction	Size	Daily Rate	Daily Trip	AM Peak Hour Pk-Hr Rate	AM Peak Hour Split In	AM Peak Hour Split Out	AM Peak Hour Trip In	AM Peak Hour Trip Out	AM Peak Hour Trip Total	PM Peak Hour Pk-Hr Rate	PM Peak Hour Split In	PM Peak Hour Split Out	PM Peak Hour Trip In	PM Peak Hour Trip Out	PM Peak Hour Trip Total
Proposed Land Uses																					
Multifamily Housing (Mid-Rise)[1]	221						408 Dwelling Units	5.44	2,220	0.360	26%	74%	38	109	147	0.44	61%	39%	110	70	180
- Residential - Retail Internal Reduction[2]									*-342*				*-3*	*-5*	*-8*				*-17*	*-11*	*-28*
- Location Based Reduction[3]		*Urban Low-Transit*	*87%*			*13%*			*-244*				*-5*	*-13*	*-18*				*-12*	*-8*	*-20*
- VMT Reduction[4]				*6.87*	*6.5*	*5%*			*-88*				*-2*	*-5*	*-7*				*-4*	*-3*	*-7*
Shopping Center[1]	820						60,330 Square Feet	37.75	2,277	0.940	62%	38%	35	22	57	3.81	48%	52%	110	120	230
- Residential - Retail Internal Reduction[2]						*15%*			*-342*				*-5*	*-3*	*-8*				*-11*	*-17*	*-28*
- Location Based Reduction[3]		*Urban Low-Transit*	*87%*			*13%*			*-252*				*-4*	*-2*	*-6*				*-13*	*-13*	*-26*
- Pass-by Trip Reduction[5]						*34%*			*-60*				*0*	*0*	*0*				*-29*	*-31*	*-60*
Baseline Vehicle Trips (Before Reductions)									4,497				73	131	204				220	190	410
Project Trips									**3,169**				**54**	**103**	**157**				**134**	**107**	**241**

Notes:

[1] Source: ITE *Trip Generation Manual*, 10th Edition 2017, average trip generation rates.

[2] As prescribed by the Transportation Impact Analysis Guidelines from VTA (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail is equal to 15% off the smaller trip generator.

[3] The project site is located within an urban low-transit area based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode shares are obtained from Table 6 of the City of San Jose Transportation Analysis Handbook (April 2018). The trip reductions are based on the percent of mode share for all of the other modes of travel besides vehicle.

[4] VMT per capita for residential use. Existing and project VMTs were estimated using the City of San Jose VMT Evaluation Tool. It is assumed that every percent reduction in VMT per-capita is equivalent to one percent reduction in peak-hour vehicle trips.

[5] Source: ITE *Trip Generation Handbook*, 3rd Edition 2017, average PM peak-hour pass-by rate for Shopping Center land use.

Project Name: 1260 Santa Clara St.					
Construction Phase	**Equipment (*See next page for example of commonly used equipment*)**	**Quantity**	**Average Hours Used Per Day**	**How Many Work Days**	**Fuel Type - if other than Diesel**
Demolition	• Concrete/Industrial Saws	1	8	3	Gas
	• Dump Trucks	3	8	14	
	• Rubber-Tired Dozers	1	6	14	
Start Date: 4/15/17					
End Date: 5/15/17					
Site Preparation	• Rubber Tired Dozers	1	8	3	
	• Tractors/Loaders/Backhoes	1	8	3	
Start Date: 5/15/17					
End Date: 6/15/17					
Grading/Excavation	• Excavators	2	8	15	
	• Rubber Tired Dozers	2	8	26	
	• Tractors/Loaders/Backhoes	2	8	23	
Start Date: 6/15/17	• Dump Trucks (based on 52,800CY)	8	6	63	
End Date: 9/01/17					
Trenching	• Excavator	1	8	2	
	• Tractor/Loader/Backhoe	1	8	3	
Start Date: 8/01/17					
End Date: 10/01/17					
Building – Exterior	• Cranes	1	8	80	
	• Forklifts	1	8	80	
	• Generator Sets	1	8	80	
	• Tractors/Loader/Backhoe				
	• Welders				
Start Date: 10/01/17					
End Date: 5/15/19					
Building – Interior/ Architectural Coating	• Air Compressors	1	8	80	
Start Date: 3/15/18					
End Date: 5/15/19					
Paving					
	• Cement and Mortar Mixers	1	8	14	
	• Pavers				
	• Paving Equipment	1	8	2	
	• Rollers				
	• Tractors/Loaders/Backhoes	1	8	14	
Start Date: 3/01/19					
End Date: 5/15/19					

OTHER – Provide as Applicable	
Soil Hauling Volume	Export volume = 60000 cubic yards? Import volume = 6000 cubic yards?
Demolition Volume	Square footage of buildings to be demolished, or total tons to be hauled. = 18,940 square feet or = ___ hauling volume (tons) Pavement demolished and hauled = 4000 tons
Power	Line Power (Y/N) Y or Generator use (Y/N) Y ? If generator use, then fuel type (diesel/gasoline/propane) ___
Cement	Cement Trucks = ___ Total Round-Trips OR Cement = 30000 cubic yards
Asphalt	___ cy or ___ round trips (TBD Comment: Majority of site is concrete pavement)

Example of Equipment Commonly Used for Each Construction Phase
Demolition
Concrete/Industrial Saws
Excavators
Rubber-Tired Dozers
Site Preparation
Rubber Tired Dozers
Tractors/Loaders/Backhoes
Grading / Excavation
Excavators
Graders
Scrapers
Rubber Tired Dozers
Tractors/Loaders/Backhoes
Trenching
Excavator
Tractor/Loader/Backhoe
Building - Exterior
Cranes
Forklifts
Generator Sets
Tractors/Loaders/Backhoes
Welders
Building – Interior/ Architectural Coating
Air Compressors
Aerial Lift
Paving
Cement and Mortar Mixers
Pavers
Paving Equipment
Rollers
Tractors/Loaders/Backhoes

1260 E Santa Clara Street Update, San Jose - Santa Clara County, Annual

1260 E Santa Clara Street Update, San Jose

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	534.00	Space	0.00	213,600.00	0
Apartments Mid Rise	408.00	Dwelling Unit	2.77	408,000.00	1167
Strip Mall	60.33	1000sqft	0.00	60,331.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 co2 rate = 290

Land Use - Provided PD and Traffic land uses

Construction Phase - Provided construction schedule - same dates starting in 2021

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Trips and VMT - EMFAC2017 0 trips, pavement demo = 4,000tons = 800 one-way trips +86 = 886 demo trips, building const - 30,000cy cement = 6,000 one-way trips

Demolition - existing building demo = 18,940sf

Grading - site prep - 6,000cy imported 60,000cy exported, grading - 52,800cy exported

Vehicle Trips - with reductions - apts = 3.79, 3.64, 3.34, retail = 27.90, 26.46, 12.86

Vehicle Emission Factors - EMFAC2017 emissions factors

Woodstoves - All gas no wood

Water And Wastewater - WTP treatment 100% aerobic

Energy Mitigation - SJCE 100% carbon free renewable energy

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	305.00
tblConstructionPhase	NumDays	220.00	422.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	6.00	57.00
tblConstructionPhase	NumDays	10.00	54.00
tblConstructionPhase	NumDays	3.00	22.00
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tblFireplaces	NumberGas	61.20	130.56
tblFireplaces	NumberWood	69.36	0.00
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tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.61	0.59
tblFleetMix	LDA	0.61	0.59
tblFleetMix	LDA	0.61	0.59
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05

tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
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tblFleetMix	LHD2	5.0150e-003	5.3030e-003
tblFleetMix	LHD2	5.0150e-003	5.3030e-003
tblFleetMix	MCY	5.2490e-003	5.0760e-003
tblFleetMix	MCY	5.2490e-003	5.0760e-003
tblFleetMix	MCY	5.2490e-003	5.0760e-003
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tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
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tblFleetMix	MH	7.0400e-004	7.5200e-004
tblFleetMix	MH	7.0400e-004	7.5200e-004
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tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.1770e-003	1.5890e-003
tblFleetMix	OBUS	2.1770e-003	1.5890e-003
tblFleetMix	OBUS	2.1770e-003	1.5890e-003
tblFleetMix	SBUS	6.3200e-004	9.2000e-004
tblFleetMix	SBUS	6.3200e-004	9.2000e-004
tblFleetMix	SBUS	6.3200e-004	9.2000e-004
tblFleetMix	UBUS	1.5140e-003	1.2480e-003
tblFleetMix	UBUS	1.5140e-003	1.2480e-003
tblFleetMix	UBUS	1.5140e-003	1.2480e-003

tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50
tblGrading	MaterialExported	0.00	52,800.00
tblGrading	MaterialExported	0.00	60,000.00
tblGrading	MaterialImported	0.00	6,000.00
tblLandUse	LandUseSquareFeet	60,330.00	60,331.00
tblLandUse	LotAcreage	4.81	0.00
tblLandUse	LotAcreage	10.74	2.77
tblLandUse	LotAcreage	1.38	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.30
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	3.30
tblOffRoadEquipment	UsageHours	8.00	0.00
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tblOffRoadEquipment	UsageHours	8.00	0.00
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tblTripsAndVMT	VendorTripNumber	89.00	0.00
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tblVehicleEF	LDT2	0.09	0.25

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tblVehicleEF	LDT2	0.07	0.41
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tblVehicleEF	LDT2	7.6800e-004	9.1000e-005
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tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.09	0.31
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tblVehicleEF	LHD2	0.01	0.02
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tblVehicleEF	LHD2	0.10	0.11
tblVehicleEF	LHD2	0.06	0.25
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tblVehicleEF	LHD2	0.02	0.02
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tblVehicleEF	LHD2	0.12	0.13

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tblVehicleEF	MCY	0.68	0.68
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tblVehicleEF	MCY	2.71	2.72
tblVehicleEF	MCY	0.58	1.89
tblVehicleEF	MCY	2.38	2.10
tblVehicleEF	MDV	8.4590e-003	3.4000e-003
tblVehicleEF	MDV	0.01	0.07

tblVehicleEF	MDV	0.97	0.78
tblVehicleEF	MDV	2.43	2.96
tblVehicleEF	MDV	429.38	364.87
tblVehicleEF	MDV	98.57	77.92
tblVehicleEF	MDV	0.12	0.07
tblVehicleEF	MDV	0.21	0.29
tblVehicleEF	MDV	1.7680e-003	1.4380e-003
tblVehicleEF	MDV	2.4430e-003	1.8100e-003
tblVehicleEF	MDV	1.6290e-003	1.3260e-003
tblVehicleEF	MDV	2.2460e-003	1.6640e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.16	0.13
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.10	0.43
tblVehicleEF	MDV	0.18	0.34
tblVehicleEF	MDV	4.2980e-003	3.6060e-003
tblVehicleEF	MDV	1.0280e-003	7.7100e-004
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.16	0.13
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.43
tblVehicleEF	MDV	0.20	0.38
tblVehicleEF	MH	0.02	9.5570e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.61	0.93
tblVehicleEF	MH	5.16	2.03
tblVehicleEF	MH	1,207.03	1,501.42
tblVehicleEF	MH	58.43	18.14

tblVehicleEF	MH	1.20	1.31
tblVehicleEF	MH	0.77	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.0680e-003	2.6100e-004
tblVehicleEF	MH	3.2200e-003	3.2790e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8200e-004	2.4000e-004
tblVehicleEF	MH	0.74	0.64
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.26	0.23
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	1.30
tblVehicleEF	MH	0.30	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7400e-004	1.7900e-004
tblVehicleEF	MH	0.74	0.64
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.26	0.23
tblVehicleEF	MH	0.11	0.08
tblVehicleEF	MH	0.02	1.30
tblVehicleEF	MH	0.33	0.10
tblVehicleEF	MHD	0.02	3.5790e-003
tblVehicleEF	MHD	4.0660e-003	1.6940e-003
tblVehicleEF	MHD	0.04	9.1320e-003
tblVehicleEF	MHD	0.37	0.39
tblVehicleEF	MHD	0.33	0.23
tblVehicleEF	MHD	5.40	1.07
tblVehicleEF	MHD	133.37	72.08
tblVehicleEF	MHD	1,186.25	1,080.76

tblVehicleEF	MHD	60.77	9.15
tblVehicleEF	MHD	0.36	0.41
tblVehicleEF	MHD	1.10	1.45
tblVehicleEF	MHD	10.18	1.70
tblVehicleEF	MHD	1.0800e-004	3.6900e-004
tblVehicleEF	MHD	3.1100e-003	7.0230e-003
tblVehicleEF	MHD	8.7400e-004	1.1500e-004
tblVehicleEF	MHD	1.0300e-004	3.5300e-004
tblVehicleEF	MHD	2.9690e-003	6.7130e-003
tblVehicleEF	MHD	8.0400e-004	1.0600e-004
tblVehicleEF	MHD	8.3100e-004	3.8300e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.4000e-004	1.9800e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.10
tblVehicleEF	MHD	0.32	0.05
tblVehicleEF	MHD	1.2850e-003	6.8400e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	7.0200e-004	9.1000e-005
tblVehicleEF	MHD	8.3100e-004	3.8300e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	4.4000e-004	1.9800e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.10
tblVehicleEF	MHD	0.35	0.05
tblVehicleEF	OBUS	0.01	7.0640e-003
tblVehicleEF	OBUS	5.8410e-003	3.6240e-003
tblVehicleEF	OBUS	0.02	0.02

tblVehicleEF	OBUS	0.24	0.58
tblVehicleEF	OBUS	0.41	0.43
tblVehicleEF	OBUS	4.81	1.84
tblVehicleEF	OBUS	100.21	92.66
tblVehicleEF	OBUS	1,290.88	1,326.08
tblVehicleEF	OBUS	66.64	15.18
tblVehicleEF	OBUS	0.21	0.38
tblVehicleEF	OBUS	0.91	1.47
tblVehicleEF	OBUS	2.68	1.09
tblVehicleEF	OBUS	1.9000e-005	1.2200e-004
tblVehicleEF	OBUS	2.7550e-003	7.3930e-003
tblVehicleEF	OBUS	8.3600e-004	1.4500e-004
tblVehicleEF	OBUS	1.9000e-005	1.1700e-004
tblVehicleEF	OBUS	2.6160e-003	7.0600e-003
tblVehicleEF	OBUS	7.6900e-004	1.3300e-004
tblVehicleEF	OBUS	1.1720e-003	1.0900e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.1800e-004	4.8500e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.30	0.09
tblVehicleEF	OBUS	9.6800e-004	8.8000e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.5100e-004	1.5000e-004
tblVehicleEF	OBUS	1.1720e-003	1.0900e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	5.1800e-004	4.8500e-004
tblVehicleEF	OBUS	0.05	0.03

tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.33	0.10
tblVehicleEF	SBUS	0.82	0.05
tblVehicleEF	SBUS	0.02	6.0180e-003
tblVehicleEF	SBUS	0.07	4.9720e-003
tblVehicleEF	SBUS	8.25	2.27
tblVehicleEF	SBUS	0.95	0.49
tblVehicleEF	SBUS	9.30	0.72
tblVehicleEF	SBUS	1,096.83	346.78
tblVehicleEF	SBUS	1,045.14	1,049.23
tblVehicleEF	SBUS	56.99	4.12
tblVehicleEF	SBUS	7.84	3.44
tblVehicleEF	SBUS	3.38	4.65
tblVehicleEF	SBUS	11.88	0.86
tblVehicleEF	SBUS	6.9900e-003	3.6120e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	9.2200e-004	4.8000e-005
tblVehicleEF	SBUS	6.6880e-003	3.4560e-003
tblVehicleEF	SBUS	2.6210e-003	2.7190e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.4800e-004	4.4000e-005
tblVehicleEF	SBUS	3.3520e-003	5.6700e-004
tblVehicleEF	SBUS	0.04	5.5090e-003
tblVehicleEF	SBUS	0.98	0.25
tblVehicleEF	SBUS	1.4930e-003	2.4700e-004
tblVehicleEF	SBUS	0.10	0.08
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.46	0.03
tblVehicleEF	SBUS	0.01	3.3010e-003

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.3000e-004	4.1000e-005
tblVehicleEF	SBUS	3.3520e-003	5.6700e-004
tblVehicleEF	SBUS	0.04	5.5090e-003
tblVehicleEF	SBUS	1.42	0.36
tblVehicleEF	SBUS	1.4930e-003	2.4700e-004
tblVehicleEF	SBUS	0.13	0.10
tblVehicleEF	SBUS	0.02	0.04
tblVehicleEF	SBUS	0.51	0.03
tblVehicleEF	UBUS	0.23	1.35
tblVehicleEF	UBUS	0.04	1.5380e-003
tblVehicleEF	UBUS	4.19	10.12
tblVehicleEF	UBUS	7.24	0.14
tblVehicleEF	UBUS	2,047.05	1,597.16
tblVehicleEF	UBUS	107.16	1.39
tblVehicleEF	UBUS	8.64	0.73
tblVehicleEF	UBUS	14.31	0.01
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.19	5.3280e-003
tblVehicleEF	UBUS	1.1060e-003	1.5000e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.18	5.0960e-003
tblVehicleEF	UBUS	1.0170e-003	1.4000e-005
tblVehicleEF	UBUS	1.8960e-003	2.1000e-005
tblVehicleEF	UBUS	0.03	1.6100e-004
tblVehicleEF	UBUS	9.9500e-004	9.0000e-006
tblVehicleEF	UBUS	0.45	0.02
tblVehicleEF	UBUS	7.1180e-003	8.1400e-004

tblVehicleEF	UBUS	0.55	6.4070e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.2020e-003	1.4000e-005
tblVehicleEF	UBUS	1.8960e-003	2.1000e-005
tblVehicleEF	UBUS	0.03	1.6100e-004
tblVehicleEF	UBUS	9.9500e-004	9.0000e-006
tblVehicleEF	UBUS	0.73	1.38
tblVehicleEF	UBUS	7.1180e-003	8.1400e-004
tblVehicleEF	UBUS	0.61	7.0150e-003
tblVehicleTrips	ST_TR	6.39	3.64
tblVehicleTrips	ST_TR	42.04	26.46
tblVehicleTrips	SU_TR	5.86	3.34
tblVehicleTrips	SU_TR	20.43	12.86
tblVehicleTrips	WD_TR	6.65	3.79
tblVehicleTrips	WD_TR	44.32	27.90
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0461	0.4742	0.2760	5.1000e-004	0.1699	0.0236	0.1934	0.0852	0.0218	0.1070	0.0000	44.7299	44.7299	0.0133	0.0000	45.0619
2022	2.2416	0.2506	0.2302	4.5000e-004	0.0000	0.0125	0.0125	0.0000	0.0120	0.0120	0.0000	38.7460	38.7460	6.3200e-003	0.0000	38.9040
2023	1.0288	0.1044	0.1109	2.1000e-004	0.0000	5.0300e-003	5.0300e-003	0.0000	4.8200e-003	4.8200e-003	0.0000	17.7737	17.7737	3.1200e-003	0.0000	17.8518
Maximum	**2.2416**	**0.4742**	**0.2760**	**5.1000e-004**	**0.1699**	**0.0236**	**0.1934**	**0.0852**	**0.0218**	**0.1070**	**0.0000**	**44.7299**	**44.7299**	**0.0133**	**0.0000**	**45.0619**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0461	0.4742	0.2760	5.1000e-004	0.1699	0.0236	0.1934	0.0852	0.0218	0.1070	0.0000	44.7299	44.7299	0.0133	0.0000	45.0618
2022	2.2416	0.2506	0.2302	4.5000e-004	0.0000	0.0125	0.0125	0.0000	0.0120	0.0120	0.0000	38.7460	38.7460	6.3200e-003	0.0000	38.9039
2023	1.0288	0.1044	0.1109	2.1000e-004	0.0000	5.0300e-003	5.0300e-003	0.0000	4.8200e-003	4.8200e-003	0.0000	17.7737	17.7737	3.1200e-003	0.0000	17.8518
Maximum	**2.2416**	**0.4742**	**0.2760**	**5.1000e-004**	**0.1699**	**0.0236**	**0.1934**	**0.0852**	**0.0218**	**0.1070**	**0.0000**	**44.7299**	**44.7299**	**0.0133**	**0.0000**	**45.0618**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-15-2021**	**7-14-2021**	0.2281	0.2281
2	**7-15-2021**	**10-14-2021**	0.2367	0.2367

3	**10-15-2021**	**1-14-2022**	0.0611	0.0611
4	**1-15-2022**	**4-14-2022**	0.2950	0.2950
5	**4-15-2022**	**7-14-2022**	0.7617	0.7617
6	**7-15-2022**	**10-14-2022**	0.7701	0.7701
7	**10-15-2022**	**1-14-2023**	0.7692	0.7692
8	**1-15-2023**	**4-14-2023**	0.7576	0.7576
9	**4-15-2023**	**7-14-2023**	0.2644	0.2644
		Highest	0.7701	0.7701

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2592	0.0490	3.0396	2.5000e-004		0.0179	0.0179		0.0179	0.0179	0.0000	21.2582	21.2582	5.0900e-003	3.0000e-004	21.4744
Energy	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	666.7834	666.7834	0.0509	0.0133	672.0284
Mobile	1.0263	1.4653	7.5112	0.0204	2.1792	0.0167	2.1959	0.5830	0.0156	0.5986	0.0000	1,960.0575	1,960.0575	0.0953	0.0000	1,962.4404
Waste						0.0000	0.0000		0.0000	0.0000	50.9568	0.0000	50.9568	3.0115	0.0000	126.2434
Water						0.0000	0.0000		0.0000	0.0000	10.9861	31.0784	42.0645	0.0409	0.0245	50.3987
Total	**3.3053**	**1.6838**	**10.6258**	**0.0217**	**2.1792**	**0.0483**	**2.2275**	**0.5830**	**0.0472**	**0.6302**	**61.9429**	**2,679.1774**	**2,741.1203**	**3.2037**	**0.0382**	**2,832.5853**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Area	2.2592	0.0490	3.0396	2.5000e-004		0.0179	0.0179		0.0179	0.0179	0.0000	21.2582	21.2582	5.0900e-003	3.0000e-004	21.4744
Energy	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	195.7321	195.7321	3.7500e-003	3.5900e-003	196.8952
Mobile	1.0263	1.4653	7.5112	0.0204	2.1792	0.0167	2.1959	0.5830	0.0156	0.5986	0.0000	1,960.0575	1,960.0575	0.0953	0.0000	1,962.4404
Waste						0.0000	0.0000		0.0000	0.0000	50.9568	0.0000	50.9568	3.0115	0.0000	126.2434
Water						0.0000	0.0000		0.0000	0.0000	10.9861	31.0784	42.0645	0.0409	0.0245	50.3987
Total	**3.3053**	**1.6838**	**10.6258**	**0.0217**	**2.1792**	**0.0483**	**2.2275**	**0.5830**	**0.0472**	**0.6302**	**61.9429**	**2,208.1261**	**2,270.0690**	**3.1565**	**0.0284**	**2,357.4521**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**17.58**	**17.18**	**1.47**	**25.52**	**16.77**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/15/2021	5/15/2021	5	22	
2	Site Preparation	Site Preparation	5/15/2021	6/15/2021	5	22	
3	Grading	Grading	6/15/2021	9/1/2021	5	57	
4	Trenching	Trenching	8/1/2021	10/1/2021	5	45	
5	Building Construction	Building Construction	10/1/2021	5/15/2023	5	422	
6	Architectural Coating	Architectural Coating	3/15/2022	5/15/2023	5	305	
7	Paving	Paving	3/1/2023	5/15/2023	5	54	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 826,200; Residential Outdoor: 275,400; Non-Residential Indoor: 90,497; Non-Residential Outdoor: 30,166; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.20	81	0.73
Demolition	Rubber Tired Dozers	1	4.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Graders	0	0.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Scrapers	0	0.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	1.00	97	0.37
Grading	Excavators	2	2.00	158	0.38
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	2	3.30	247	0.40
Grading	Tractors/Loaders/Backhoes	2	3.00	97	0.37
Trenching	Excavators	1	0.40	158	0.38
Trenching	Tractors/Loaders/Backhoes	1	0.50	97	0.37
Building Construction	Cranes	1	1.50	231	0.29
Building Construction	Forklifts	1	1.50	89	0.20
Building Construction	Generator Sets	1	1.50	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Air Compressors	1	2.10	78	0.48
Paving	Cement and Mortar Mixers	1	2.10	9	0.56
Paving	Pavers	0	0.00	130	0.42
Paving	Paving Equipment	1	0.30	132	0.36
Paving	Rollers	0	0.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	2.10	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	2	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	2	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.3200e-003	0.0000	9.3200e-003	1.4100e-003	0.0000	1.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3900e-003	0.0654	0.0283	6.0000e-005		3.2100e-003	3.2100e-003		2.9800e-003	2.9800e-003	0.0000	5.0152	5.0152	1.3900e-003	0.0000	5.0499
Total	**6.3900e-003**	**0.0654**	**0.0283**	**6.0000e-005**	**9.3200e-003**	**3.2100e-003**	**0.0125**	**1.4100e-003**	**2.9800e-003**	**4.3900e-003**	**0.0000**	**5.0152**	**5.0152**	**1.3900e-003**	**0.0000**	**5.0499**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.3200e-003	0.0000	9.3200e-003	1.4100e-003	0.0000	1.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3900e-003	0.0654	0.0283	6.0000e-005		3.2100e-003	3.2100e-003		2.9800e-003	2.9800e-003	0.0000	5.0152	5.0152	1.3900e-003	0.0000	5.0499
Total	**6.3900e-003**	**0.0654**	**0.0283**	**6.0000e-005**	**9.3200e-003**	**3.2100e-003**	**0.0125**	**1.4100e-003**	**2.9800e-003**	**4.3900e-003**	**0.0000**	**5.0152**	**5.0152**	**1.3900e-003**	**0.0000**	**5.0499**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0144	0.0000	0.0144	5.3700e-003	0.0000	5.3700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0177	8.6600e-003	2.0000e-005		8.9000e-004	8.9000e-004		8.1000e-004	8.1000e-004	0.0000	1.4074	1.4074	4.6000e-004	0.0000	1.4187
Total	**1.7000e-003**	**0.0177**	**8.6600e-003**	**2.0000e-005**	**0.0144**	**8.9000e-004**	**0.0153**	**5.3700e-003**	**8.1000e-004**	**6.1800e-003**	**0.0000**	**1.4074**	**1.4074**	**4.6000e-004**	**0.0000**	**1.4187**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0144	0.0000	0.0144	5.3700e-003	0.0000	5.3700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0177	8.6600e-003	2.0000e-005		8.9000e-004	8.9000e-004		8.1000e-004	8.1000e-004	0.0000	1.4074	1.4074	4.6000e-004	0.0000	1.4187
Total	**1.7000e-003**	**0.0177**	**8.6600e-003**	**2.0000e-005**	**0.0144**	**8.9000e-004**	**0.0153**	**5.3700e-003**	**8.1000e-004**	**6.1800e-003**	**0.0000**	**1.4074**	**1.4074**	**4.6000e-004**	**0.0000**	**1.4187**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Fugitive Dust					0.1462	0.0000	0.1462	0.0785	0.0000	0.0785	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0319	0.3292	0.1899	3.4000e-004		0.0164	0.0164		0.0151	0.0151	0.0000	29.9485	29.9485	9.6900e-003	0.0000	30.1907
Total	**0.0319**	**0.3292**	**0.1899**	**3.4000e-004**	**0.1462**	**0.0164**	**0.1626**	**0.0785**	**0.0151**	**0.0936**	**0.0000**	**29.9485**	**29.9485**	**9.6900e-003**	**0.0000**	**30.1907**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1462	0.0000	0.1462	0.0785	0.0000	0.0785	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0319	0.3292	0.1899	3.4000e-004		0.0164	0.0164		0.0151	0.0151	0.0000	29.9485	29.9485	9.6900e-003	0.0000	30.1906

Total	**0.0319**	**0.3292**	**0.1899**	**3.4000e-004**	**0.1462**	**0.0164**	**0.1626**	**0.0785**	**0.0151**	**0.0936**	**0.0000**	**29.9485**	**29.9485**	**9.6900e-003**	**0.0000**	**30.1906**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2000e-004	5.0900e-003	6.8600e-003	1.0000e-005		2.7000e-004	2.7000e-004		2.5000e-004	2.5000e-004	0.0000	0.8944	0.8944	2.9000e-004	0.0000	0.9016
Total	**5.2000e-004**	**5.0900e-003**	**6.8600e-003**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.8944**	**0.8944**	**2.9000e-004**	**0.0000**	**0.9016**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2000e-004	5.0900e-003	6.8600e-003	1.0000e-005		2.7000e-004	2.7000e-004		2.5000e-004	2.5000e-004	0.0000	0.8944	0.8944	2.9000e-004	0.0000	0.9016
Total	**5.2000e-004**	**5.0900e-003**	**6.8600e-003**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.8944**	**0.8944**	**2.9000e-004**	**0.0000**	**0.9016**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5700e-003	0.0569	0.0423	9.0000e-005		2.7700e-003	2.7700e-003		2.6400e-003	2.6400e-003	0.0000	7.4645	7.4645	1.4600e-003	0.0000	7.5010
Total	**5.5700e-003**	**0.0569**	**0.0423**	**9.0000e-005**		**2.7700e-003**	**2.7700e-003**		**2.6400e-003**	**2.6400e-003**	**0.0000**	**7.4645**	**7.4645**	**1.4600e-003**	**0.0000**	**7.5010**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5700e-003	0.0569	0.0423	9.0000e-005		2.7700e-003	2.7700e-003		2.6400e-003	2.6400e-003	0.0000	7.4645	7.4645	1.4600e-003	0.0000	7.5010
Total	**5.5700e-003**	**0.0569**	**0.0423**	**9.0000e-005**		**2.7700e-003**	**2.7700e-003**		**2.6400e-003**	**2.6400e-003**	**0.0000**	**7.4645**	**7.4645**	**1.4600e-003**	**0.0000**	**7.5010**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0199	0.1991	0.1639	3.4000e-004		9.5200e-003	9.5200e-003		9.0400e-003	9.0400e-003	0.0000	29.4075	29.4075	5.7100e-003	0.0000	29.5502
Total	**0.0199**	**0.1991**	**0.1639**	**3.4000e-004**		**9.5200e-003**	**9.5200e-003**		**9.0400e-003**	**9.0400e-003**	**0.0000**	**29.4075**	**29.4075**	**5.7100e-003**	**0.0000**	**29.5502**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0199	0.1991	0.1639	3.4000e-004		9.5200e-003	9.5200e-003		9.0400e-003	9.0400e-003	0.0000	29.4075	29.4075	5.7100e-003	0.0000	29.5502
Total	**0.0199**	**0.1991**	**0.1639**	**3.4000e-004**		**9.5200e-003**	**9.5200e-003**		**9.0400e-003**	**9.0400e-003**	**0.0000**	**29.4075**	**29.4075**	**5.7100e-003**	**0.0000**	**29.5502**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8400e-003	0.0674	0.0598	1.2000e-004		3.1200e-003	3.1200e-003		2.9600e-003	2.9600e-003	0.0000	10.8581	10.8581	2.0900e-003	0.0000	10.9103
Total	**6.8400e-003**	**0.0674**	**0.0598**	**1.2000e-004**		**3.1200e-003**	**3.1200e-003**		**2.9600e-003**	**2.9600e-003**	**0.0000**	**10.8581**	**10.8581**	**2.0900e-003**	**0.0000**	**10.9103**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8400e-003	0.0674	0.0598	1.2000e-004		3.1200e-003	3.1200e-003		2.9600e-003	2.9600e-003	0.0000	10.8581	10.8581	2.0900e-003	0.0000	10.9103
Total	**6.8400e-003**	**0.0674**	**0.0598**	**1.2000e-004**		**3.1200e-003**	**3.1200e-003**		**2.9600e-003**	**2.9600e-003**	**0.0000**	**10.8581**	**10.8581**	**2.0900e-003**	**0.0000**	**10.9103**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2142					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4800e-003	0.0515	0.0663	1.1000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	9.3385	9.3385	6.1000e-004	0.0000	9.3537
Total	**2.2217**	**0.0515**	**0.0663**	**1.1000e-004**		**2.9900e-003**	**2.9900e-003**		**2.9900e-003**	**2.9900e-003**	**0.0000**	**9.3385**	**9.3385**	**6.1000e-004**	**0.0000**	**9.3537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.2142					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4800e-003	0.0515	0.0663	1.1000e-004		2.9900e-003	2.9900e-003		2.9900e-003	2.9900e-003	0.0000	9.3385	9.3385	6.1000e-004	0.0000	9.3537
Total	**2.2217**	**0.0515**	**0.0663**	**1.1000e-004**		**2.9900e-003**	**2.9900e-003**		**2.9900e-003**	**2.9900e-003**	**0.0000**	**9.3385**	**9.3385**	**6.1000e-004**	**0.0000**	**9.3537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2200e-003	0.0219	0.0304	5.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	4.2895	4.2895	2.6000e-004	0.0000	4.2959
Total	**1.0203**	**0.0219**	**0.0304**	**5.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**4.2895**	**4.2895**	**2.6000e-004**	**0.0000**	**4.2959**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0170					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2200e-003	0.0219	0.0304	5.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	4.2895	4.2895	2.6000e-004	0.0000	4.2959
Total	**1.0203**	**0.0219**	**0.0304**	**5.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**4.2895**	**4.2895**	**2.6000e-004**	**0.0000**	**4.2959**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.8 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6600e-003	0.0151	0.0206	3.0000e-005		7.2000e-004	7.2000e-004		6.7000e-004	6.7000e-004	0.0000	2.6262	2.6262	7.8000e-004	0.0000	2.6456

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6600e-003**	**0.0151**	**0.0206**	**3.0000e-005**		**7.2000e-004**	**7.2000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**2.6262**	**2.6262**	**7.8000e-004**	**0.0000**	**2.6456**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6600e-003	0.0151	0.0206	3.0000e-005		7.2000e-004	7.2000e-004		6.7000e-004	6.7000e-004	0.0000	2.6262	2.6262	7.8000e-004	0.0000	2.6456
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6600e-003**	**0.0151**	**0.0206**	**3.0000e-005**		**7.2000e-004**	**7.2000e-004**		**6.7000e-004**	**6.7000e-004**	**0.0000**	**2.6262**	**2.6262**	**7.8000e-004**	**0.0000**	**2.6456**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0263	1.4653	7.5112	0.0204	2.1792	0.0167	2.1959	0.5830	0.0156	0.5986	0.0000	1,960.0575	1,960.0575	0.0953	0.0000	1,962.4404
Unmitigated	1.0263	1.4653	7.5112	0.0204	2.1792	0.0167	2.1959	0.5830	0.0156	0.5986	0.0000	1,960.0575	1,960.0575	0.0953	0.0000	1,962.4404

4.2 Trip Summary Information

	Average Daily Trip Rate	Unmitigated	Mitigated

Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,546.32	1,485.12	1362.72	3,490,622	3,490,622
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	1,683.21	1,596.33	775.84	2,373,457	2,373,457
Total	3,229.53	3,081.45	2,138.56	5,864,079	5,864,079

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.591953	0.053004	0.176619	0.106733	0.020956	0.005303	0.013483	0.022364	0.001589	0.001248	0.005076	0.000920	0.000752
Enclosed Parking with Elevator	0.591953	0.053004	0.176619	0.106733	0.020956	0.005303	0.013483	0.022364	0.001589	0.001248	0.005076	0.000920	0.000752
Strip Mall	0.591953	0.053004	0.176619	0.106733	0.020956	0.005303	0.013483	0.022364	0.001589	0.001248	0.005076	0.000920	0.000752

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	471.0513	471.0513	0.0471	9.7500e-003	475.1332	
NaturalGas Mitigated	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	195.7321	195.7321	3.7500e-003	3.5900e-003	196.8952	
NaturalGas Unmitigated	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	195.7321	195.7321	3.7500e-003	3.5900e-003	196.8952	

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.5249e+006	0.0190	0.1624	0.0691	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.1019	188.1019	3.6100e-003	3.4500e-003	189.2197
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	142984	7.7000e-004	7.0100e-003	5.8900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6302	7.6302	1.5000e-004	1.4000e-004	7.6755
Total		**0.0198**	**0.1694**	**0.0750**	**1.0800e-003**		**0.0137**	**0.0137**		**0.0137**	**0.0137**	**0.0000**	**195.7321**	**195.7321**	**3.7600e-003**	**3.5900e-003**	**196.8952**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.5249e+006	0.0190	0.1624	0.0691	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.1019	188.1019	3.6100e-003	3.4500e-003	189.2197
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	142984	7.7000e-004	7.0100e-003	5.8900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6302	7.6302	1.5000e-004	1.4000e-004	7.6755

Total		**0.0198**	**0.1694**	**0.0750**	**1.0800e-003**		**0.0137**	**0.0137**		**0.0137**	**0.0137**	**0.0000**	**195.7321**	**195.7321**	**3.7600e-003**	**3.5900e-003**	**196.8952**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.68437e+006	221.5646	0.0222	4.5800e-003	223.4846
Enclosed Parking with Elevator	1.2517e+006	164.6503	0.0165	3.4100e-003	166.0771
Strip Mall	644938	84.8364	8.4800e-003	1.7600e-003	85.5715
Total		**471.0513**	**0.0471**	**9.7500e-003**	**475.1332**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.2592	0.0490	3.0396	2.5000e-004		0.0179	0.0179		0.0179	0.0179	0.0000	21.2582	21.2582	5.0900e-003	3.0000e-004	21.4744
Unmitigated	2.2592	0.0490	3.0396	2.5000e-004		0.0179	0.0179		0.0179	0.0179	0.0000	21.2582	21.2582	5.0900e-003	3.0000e-004	21.4744

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3231					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6500e-003	0.0141	5.9900e-003	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	16.2990	16.2990	3.1000e-004	3.0000e-004	16.3959
Landscaping	0.0916	0.0349	3.0336	1.6000e-004		0.0168	0.0168		0.0168	0.0168	0.0000	4.9592	4.9592	4.7800e-003	0.0000	5.0786
Total	**2.2592**	**0.0490**	**3.0396**	**2.5000e-004**		**0.0179**	**0.0179**		**0.0179**	**0.0179**	**0.0000**	**21.2582**	**21.2582**	**5.0900e-003**	**3.0000e-004**	**21.4744**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3231					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6500e-003	0.0141	5.9900e-003	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	16.2990	16.2990	3.1000e-004	3.0000e-004	16.3959
Landscaping	0.0916	0.0349	3.0336	1.6000e-004		0.0168	0.0168		0.0168	0.0168	0.0000	4.9592	4.9592	4.7800e-003	0.0000	5.0786
Total	**2.2592**	**0.0490**	**3.0396**	**2.5000e-004**		**0.0179**	**0.0179**		**0.0179**	**0.0179**	**0.0000**	**21.2582**	**21.2582**	**5.0900e-003**	**3.0000e-004**	**21.4744**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	42.0645	0.0409	0.0245	50.3987
Unmitigated	42.0645	0.0409	0.0245	50.3987

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	26.5828 / 16.7587	36.0417	0.0350	0.0210	43.1767
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.4688 / 2.73894	6.0228	5.8900e-003	3.5300e-003	7.2220
Total		**42.0645**	**0.0409**	**0.0245**	**50.3987**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	26.5828 / 16.7587	36.0417	0.0350	0.0210	43.1767
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.4688 / 2.73894	6.0228	5.8900e-003	3.5300e-003	7.2220
Total		**42.0645**	**0.0409**	**0.0245**	**50.3987**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	50.9568	3.0115	0.0000	126.2434
Unmitigated	50.9568	3.0115	0.0000	126.2434

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	187.68	38.0973	2.2515	0.0000	94.3846
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.35	12.8595	0.7600	0.0000	31.8588
Total		**50.9568**	**3.0115**	**0.0000**	**126.2434**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Apartments Mid Rise	187.68	38.0973	2.2515	0.0000	94.3846
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.35	12.8595	0.7600	0.0000	31.8588
Total		**50.9568**	**3.0115**	**0.0000**	**126.2434**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1260 E Santa Clara Street Update, San Jose - Santa Clara County, Annual

1260 E Santa Clara Street Update, San Jose - 2030

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	534.00	Space	0.00	213,600.00	0
Apartments Mid Rise	408.00	Dwelling Unit	2.77	408,000.00	1167
Strip Mall	60.33	1000sqft	0.00	60,331.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 co2 rate = 290

Land Use - Provided PD and Traffic land uses

Construction Phase - Provided construction schedule - same dates starting in 2021

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Off-road Equipment - Provided constructino equip & hours

Trips and VMT - EMFAC2017 0 trips, pavement demo = 4,000tons = 800 one-way trips +86 = 886 demo trips, building const - 30,000cy cement = 6,000 one-way trips

Demolition - existing building demo = 18,940sf

Grading - site prep - 6,000cy imported 60,000cy exported, grading - 52,800cy exported

Vehicle Trips - with reductions - apts = 3.79, 3.64, 3.34, retail = 27.90, 26.46, 12.86

Vehicle Emission Factors - EMFAC2017 emissions factors

Woodstoves - All gas no wood

Water And Wastewater - WTP treatment 100% aerobic

Energy Mitigation - SJCE 100% carbon free renewable energy

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	305.00
tblConstructionPhase	NumDays	220.00	422.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	6.00	57.00
tblConstructionPhase	NumDays	10.00	54.00
tblConstructionPhase	NumDays	3.00	22.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	61.20	130.56
tblFireplaces	NumberWood	69.36	0.00
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	HHD	0.02	0.02
tblFleetMix	LDA	0.62	0.60
tblFleetMix	LDA	0.62	0.60
tblFleetMix	LDA	0.62	0.60
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05
tblFleetMix	LDT1	0.03	0.05

tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LDT2	0.18	0.17
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD1	0.01	0.02
tblFleetMix	LHD2	5.0600e-003	5.5563e-003
tblFleetMix	LHD2	5.0600e-003	5.5563e-003
tblFleetMix	LHD2	5.0600e-003	5.5563e-003
tblFleetMix	MCY	5.1220e-003	4.7803e-003
tblFleetMix	MCY	5.1220e-003	4.7803e-003
tblFleetMix	MCY	5.1220e-003	4.7803e-003
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MDV	0.10	0.11
tblFleetMix	MH	6.5100e-004	7.2763e-004
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tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	MHD	0.01	0.01
tblFleetMix	OBUS	2.2210e-003	1.4429e-003
tblFleetMix	OBUS	2.2210e-003	1.4429e-003
tblFleetMix	OBUS	2.2210e-003	1.4429e-003
tblFleetMix	SBUS	6.4600e-004	9.0041e-004
tblFleetMix	SBUS	6.4600e-004	9.0041e-004
tblFleetMix	SBUS	6.4600e-004	9.0041e-004
tblFleetMix	UBUS	1.4700e-003	1.1782e-003
tblFleetMix	UBUS	1.4700e-003	1.1782e-003
tblFleetMix	UBUS	1.4700e-003	1.1782e-003

tblGrading	AcresOfGrading	0.00	3.00
tblGrading	AcresOfGrading	0.00	4.50
tblGrading	MaterialExported	0.00	52,800.00
tblGrading	MaterialExported	0.00	60,000.00
tblGrading	MaterialImported	0.00	6,000.00
tblLandUse	LandUseSquareFeet	60,330.00	60,331.00
tblLandUse	LotAcreage	4.81	0.00
tblLandUse	LotAcreage	10.74	2.77
tblLandUse	LotAcreage	1.38	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	UsageHours	7.00	1.50
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tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.30
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	3.30
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	2.10
tblOffRoadEquipment	UsageHours	7.00	1.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblTripsAndVMT	HaulingTripNumber	86.00	0.00
tblTripsAndVMT	HaulingTripNumber	8,250.00	0.00
tblTripsAndVMT	HaulingTripNumber	6,600.00	0.00
tblTripsAndVMT	VendorTripNumber	89.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00
tblTripsAndVMT	WorkerTripNumber	403.00	0.00
tblTripsAndVMT	WorkerTripNumber	81.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblVehicleEF	HHD	0.27	0.02
tblVehicleEF	HHD	0.06	0.05
tblVehicleEF	HHD	0.06	0.00
tblVehicleEF	HHD	1.43	6.28
tblVehicleEF	HHD	0.94	0.41
tblVehicleEF	HHD	4.01	6.6850e-003
tblVehicleEF	HHD	4,037.05	930.05
tblVehicleEF	HHD	1,498.85	1,226.35
tblVehicleEF	HHD	12.27	0.05

tblVehicleEF	HHD	12.16	5.20
tblVehicleEF	HHD	1.59	2.52
tblVehicleEF	HHD	19.20	2.31
tblVehicleEF	HHD	3.6830e-003	2.1460e-003
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tblVehicleEF	HHD	0.04	0.04
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tblVehicleEF	HHD	0.37	0.42
tblVehicleEF	HHD	6.4000e-005	1.0000e-006
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tblVehicleEF	HHD	1.8800e-004	1.0000e-006
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tblVehicleEF	HHD	4.6010e-003	5.8000e-005
tblVehicleEF	HHD	0.43	0.49
tblVehicleEF	HHD	6.4000e-005	1.0000e-006
tblVehicleEF	HHD	0.15	0.07
tblVehicleEF	HHD	4.1900e-004	2.8400e-004
tblVehicleEF	HHD	0.08	2.0000e-006

tblVehicleEF	LDA	1.8990e-003	9.5900e-004
tblVehicleEF	LDA	2.1050e-003	0.03
tblVehicleEF	LDA	0.33	0.41
tblVehicleEF	LDA	0.63	1.72
tblVehicleEF	LDA	181.37	199.86
tblVehicleEF	LDA	42.51	42.17
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.03	0.13
tblVehicleEF	LDA	1.1470e-003	9.2900e-004
tblVehicleEF	LDA	1.8260e-003	1.2750e-003
tblVehicleEF	LDA	1.0560e-003	8.5500e-004
tblVehicleEF	LDA	1.6790e-003	1.1720e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	4.7560e-003	3.2470e-003
tblVehicleEF	LDA	0.03	0.17
tblVehicleEF	LDA	0.03	0.12
tblVehicleEF	LDA	1.8150e-003	9.0000e-005
tblVehicleEF	LDA	4.3500e-004	0.00
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	6.9190e-003	4.7160e-003
tblVehicleEF	LDA	0.03	0.17
tblVehicleEF	LDA	0.03	0.13
tblVehicleEF	LDT1	3.6800e-003	1.6710e-003
tblVehicleEF	LDT1	4.5270e-003	0.04
tblVehicleEF	LDT1	0.55	0.54
tblVehicleEF	LDT1	1.12	1.85

tblVehicleEF	LDT1	233.07	241.46
tblVehicleEF	LDT1	54.62	51.55
tblVehicleEF	LDT1	0.05	0.03
tblVehicleEF	LDT1	0.06	0.15
tblVehicleEF	LDT1	1.4520e-003	1.0700e-003
tblVehicleEF	LDT1	2.1870e-003	1.4610e-003
tblVehicleEF	LDT1	1.3350e-003	9.8400e-004
tblVehicleEF	LDT1	2.0110e-003	1.3440e-003
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	9.1170e-003	6.5000e-003
tblVehicleEF	LDT1	0.09	0.36
tblVehicleEF	LDT1	0.06	0.15
tblVehicleEF	LDT1	2.3350e-003	2.5670e-003
tblVehicleEF	LDT1	5.6500e-004	0.00
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.12	0.09
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.01	9.4830e-003
tblVehicleEF	LDT1	0.09	0.36
tblVehicleEF	LDT1	0.07	0.17
tblVehicleEF	LDT2	2.9960e-003	1.7260e-003
tblVehicleEF	LDT2	3.1970e-003	0.04
tblVehicleEF	LDT2	0.49	0.56
tblVehicleEF	LDT2	0.89	2.29
tblVehicleEF	LDT2	264.16	249.80
tblVehicleEF	LDT2	61.38	53.79
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.05	0.17

tblVehicleEF	LDT2	1.3060e-003	1.0250e-003
tblVehicleEF	LDT2	2.0190e-003	1.3400e-003
tblVehicleEF	LDT2	1.2010e-003	9.4400e-004
tblVehicleEF	LDT2	1.8570e-003	1.2320e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	7.4390e-003	6.5530e-003
tblVehicleEF	LDT2	0.06	0.34
tblVehicleEF	LDT2	0.04	0.18
tblVehicleEF	LDT2	2.6450e-003	9.4800e-003
tblVehicleEF	LDT2	6.2800e-004	8.5000e-005
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	9.5240e-003
tblVehicleEF	LDT2	0.06	0.34
tblVehicleEF	LDT2	0.05	0.20
tblVehicleEF	LHD1	3.9820e-003	4.1480e-003
tblVehicleEF	LHD1	8.6490e-003	5.1950e-003
tblVehicleEF	LHD1	0.01	9.0230e-003
tblVehicleEF	LHD1	0.14	0.18
tblVehicleEF	LHD1	0.61	0.47
tblVehicleEF	LHD1	1.67	0.89
tblVehicleEF	LHD1	8.93	8.25
tblVehicleEF	LHD1	641.43	698.55
tblVehicleEF	LHD1	26.94	10.09
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.53	0.30
tblVehicleEF	LHD1	0.67	0.23

tblVehicleEF	LHD1	7.8900e-004	9.1500e-004
tblVehicleEF	LHD1	0.01	9.9010e-003
tblVehicleEF	LHD1	0.01	7.0190e-003
tblVehicleEF	LHD1	6.6500e-004	2.1000e-004
tblVehicleEF	LHD1	7.5500e-004	8.7500e-004
tblVehicleEF	LHD1	2.6030e-003	2.4750e-003
tblVehicleEF	LHD1	9.7020e-003	6.6710e-003
tblVehicleEF	LHD1	6.1100e-004	1.9300e-004
tblVehicleEF	LHD1	1.8620e-003	1.4030e-003
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	1.0210e-003	7.7200e-004
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.26	0.43
tblVehicleEF	LHD1	0.15	0.04
tblVehicleEF	LHD1	8.9000e-005	8.0000e-005
tblVehicleEF	LHD1	6.2670e-003	6.8120e-003
tblVehicleEF	LHD1	3.0000e-004	1.0000e-004
tblVehicleEF	LHD1	1.8620e-003	1.4030e-003
tblVehicleEF	LHD1	0.08	0.05
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.0210e-003	7.7200e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.26	0.43
tblVehicleEF	LHD1	0.16	0.05
tblVehicleEF	LHD2	2.5430e-003	2.5050e-003
tblVehicleEF	LHD2	5.3180e-003	5.3390e-003
tblVehicleEF	LHD2	3.2330e-003	4.8110e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.45	0.49

tblVehicleEF	LHD2	0.88	0.48
tblVehicleEF	LHD2	13.62	13.00
tblVehicleEF	LHD2	675.95	679.81
tblVehicleEF	LHD2	21.83	6.44
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.22	0.38
tblVehicleEF	LHD2	0.26	0.12
tblVehicleEF	LHD2	1.0460e-003	1.5020e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	9.3120e-003	0.01
tblVehicleEF	LHD2	3.7400e-004	1.0600e-004
tblVehicleEF	LHD2	1.0000e-003	1.4370e-003
tblVehicleEF	LHD2	2.7080e-003	2.7110e-003
tblVehicleEF	LHD2	8.8860e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	9.8000e-005
tblVehicleEF	LHD2	5.1500e-004	6.4200e-004
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.0800e-004	3.7400e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.04	0.14
tblVehicleEF	LHD2	0.04	0.02
tblVehicleEF	LHD2	1.3300e-004	1.2400e-004
tblVehicleEF	LHD2	6.5670e-003	6.5570e-003
tblVehicleEF	LHD2	2.3300e-004	6.4000e-005
tblVehicleEF	LHD2	5.1500e-004	6.4200e-004
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.0800e-004	3.7400e-004
tblVehicleEF	LHD2	0.11	0.11

tblVehicleEF	LHD2	0.04	0.14
tblVehicleEF	LHD2	0.05	0.02
tblVehicleEF	MCY	0.46	0.32
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	17.52	17.61
tblVehicleEF	MCY	10.34	9.20
tblVehicleEF	MCY	171.38	209.76
tblVehicleEF	MCY	42.85	59.23
tblVehicleEF	MCY	1.14	1.14
tblVehicleEF	MCY	0.32	0.27
tblVehicleEF	MCY	2.1570e-003	2.1380e-003
tblVehicleEF	MCY	3.3210e-003	2.8620e-003
tblVehicleEF	MCY	2.0120e-003	1.9940e-003
tblVehicleEF	MCY	3.1070e-003	2.6760e-003
tblVehicleEF	MCY	0.88	1.79
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	0.46	0.95
tblVehicleEF	MCY	2.12	2.13
tblVehicleEF	MCY	0.46	1.49
tblVehicleEF	MCY	2.11	1.88
tblVehicleEF	MCY	2.0640e-003	2.0760e-003
tblVehicleEF	MCY	6.5900e-004	5.8600e-004
tblVehicleEF	MCY	0.88	1.79
tblVehicleEF	MCY	0.61	0.63
tblVehicleEF	MCY	0.46	0.95
tblVehicleEF	MCY	2.66	2.67
tblVehicleEF	MCY	0.46	1.49
tblVehicleEF	MCY	2.30	2.04
tblVehicleEF	MDV	5.1180e-003	1.7720e-003
tblVehicleEF	MDV	7.2260e-003	0.04

tblVehicleEF	MDV	0.68	0.55
tblVehicleEF	MDV	1.51	2.32
tblVehicleEF	MDV	358.67	301.13
tblVehicleEF	MDV	82.28	63.46
tblVehicleEF	MDV	0.07	0.04
tblVehicleEF	MDV	0.11	0.18
tblVehicleEF	MDV	1.3880e-003	1.0340e-003
tblVehicleEF	MDV	2.0820e-003	1.3440e-003
tblVehicleEF	MDV	1.2780e-003	9.5400e-004
tblVehicleEF	MDV	1.9150e-003	1.2360e-003
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.01	6.8870e-003
tblVehicleEF	MDV	0.09	0.34
tblVehicleEF	MDV	0.10	0.20
tblVehicleEF	MDV	3.5870e-003	2.9760e-003
tblVehicleEF	MDV	8.4800e-004	6.2800e-004
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.13	0.10
tblVehicleEF	MDV	0.05	0.06
tblVehicleEF	MDV	0.02	9.9830e-003
tblVehicleEF	MDV	0.09	0.34
tblVehicleEF	MDV	0.11	0.22
tblVehicleEF	MH	8.2310e-003	5.0270e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.45	0.31
tblVehicleEF	MH	3.72	1.64
tblVehicleEF	MH	1,184.19	1,350.27
tblVehicleEF	MH	56.79	15.54

tblVehicleEF	MH	0.84	1.06
tblVehicleEF	MH	0.62	0.24
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.8300e-004	2.1200e-004
tblVehicleEF	MH	3.2210e-003	3.2970e-003
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	8.1200e-004	1.9500e-004
tblVehicleEF	MH	0.46	0.35
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.18	0.14
tblVehicleEF	MH	0.04	0.04
tblVehicleEF	MH	0.01	0.54
tblVehicleEF	MH	0.22	0.07
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3200e-004	1.5400e-004
tblVehicleEF	MH	0.46	0.35
tblVehicleEF	MH	0.04	0.03
tblVehicleEF	MH	0.18	0.14
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.01	0.54
tblVehicleEF	MH	0.24	0.08
tblVehicleEF	MHD	0.02	3.8320e-003
tblVehicleEF	MHD	2.7470e-003	1.0340e-003
tblVehicleEF	MHD	0.03	8.3830e-003
tblVehicleEF	MHD	0.37	0.41
tblVehicleEF	MHD	0.25	0.15
tblVehicleEF	MHD	3.74	0.87
tblVehicleEF	MHD	131.96	65.10
tblVehicleEF	MHD	1,167.79	993.45

tblVehicleEF	MHD	59.45	8.55
tblVehicleEF	MHD	0.34	0.34
tblVehicleEF	MHD	1.04	1.43
tblVehicleEF	MHD	9.99	1.69
tblVehicleEF	MHD	5.2000e-005	1.6200e-004
tblVehicleEF	MHD	3.0080e-003	7.0060e-003
tblVehicleEF	MHD	8.2100e-004	1.1200e-004
tblVehicleEF	MHD	5.0000e-005	1.5500e-004
tblVehicleEF	MHD	2.8710e-003	6.6960e-003
tblVehicleEF	MHD	7.5400e-004	1.0300e-004
tblVehicleEF	MHD	6.4300e-004	2.8900e-004
tblVehicleEF	MHD	0.03	0.01
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	3.8200e-004	1.6800e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	0.23	0.04
tblVehicleEF	MHD	1.2710e-003	6.1800e-004
tblVehicleEF	MHD	0.01	9.4800e-003
tblVehicleEF	MHD	6.6000e-004	8.5000e-005
tblVehicleEF	MHD	6.4300e-004	2.8900e-004
tblVehicleEF	MHD	0.03	0.01
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	3.8200e-004	1.6800e-004
tblVehicleEF	MHD	0.05	0.01
tblVehicleEF	MHD	0.02	0.07
tblVehicleEF	MHD	0.25	0.05
tblVehicleEF	OBUS	0.01	7.0980e-003
tblVehicleEF	OBUS	4.0840e-003	2.1970e-003
tblVehicleEF	OBUS	0.02	0.02

tblVehicleEF	OBUS	0.24	0.64
tblVehicleEF	OBUS	0.30	0.26
tblVehicleEF	OBUS	4.08	1.58
tblVehicleEF	OBUS	110.55	97.36
tblVehicleEF	OBUS	1,272.30	1,210.85
tblVehicleEF	OBUS	64.94	13.46
tblVehicleEF	OBUS	0.24	0.43
tblVehicleEF	OBUS	0.85	1.45
tblVehicleEF	OBUS	2.74	1.13
tblVehicleEF	OBUS	2.2000e-005	1.4200e-004
tblVehicleEF	OBUS	2.8340e-003	7.8820e-003
tblVehicleEF	OBUS	9.3800e-004	1.5600e-004
tblVehicleEF	OBUS	2.1000e-005	1.3600e-004
tblVehicleEF	OBUS	2.6900e-003	7.5260e-003
tblVehicleEF	OBUS	8.6200e-004	1.4400e-004
tblVehicleEF	OBUS	1.1660e-003	1.0620e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	5.3200e-004	4.8700e-004
tblVehicleEF	OBUS	0.04	0.02
tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.26	0.08
tblVehicleEF	OBUS	1.0660e-003	9.2400e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.2100e-004	1.3300e-004
tblVehicleEF	OBUS	1.1660e-003	1.0620e-003
tblVehicleEF	OBUS	0.01	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	5.3200e-004	4.8700e-004
tblVehicleEF	OBUS	0.05	0.02

tblVehicleEF	OBUS	0.03	0.18
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	SBUS	0.81	0.07
tblVehicleEF	SBUS	7.6490e-003	4.4040e-003
tblVehicleEF	SBUS	0.06	6.3380e-003
tblVehicleEF	SBUS	8.87	2.93
tblVehicleEF	SBUS	0.48	0.37
tblVehicleEF	SBUS	7.57	0.86
tblVehicleEF	SBUS	1,023.58	337.48
tblVehicleEF	SBUS	1,008.60	970.50
tblVehicleEF	SBUS	61.81	5.06
tblVehicleEF	SBUS	4.35	2.71
tblVehicleEF	SBUS	1.72	3.09
tblVehicleEF	SBUS	10.76	1.18
tblVehicleEF	SBUS	2.1870e-003	2.0480e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.4940e-003	0.02
tblVehicleEF	SBUS	1.1020e-003	6.8000e-005
tblVehicleEF	SBUS	2.0920e-003	1.9600e-003
tblVehicleEF	SBUS	2.5880e-003	2.6690e-003
tblVehicleEF	SBUS	8.1060e-003	0.02
tblVehicleEF	SBUS	1.0130e-003	6.2000e-005
tblVehicleEF	SBUS	3.7080e-003	8.7000e-004
tblVehicleEF	SBUS	0.03	8.3040e-003
tblVehicleEF	SBUS	1.05	0.32
tblVehicleEF	SBUS	1.7580e-003	4.1400e-004
tblVehicleEF	SBUS	0.07	0.06
tblVehicleEF	SBUS	0.02	0.05
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.01	3.2190e-003

tblVehicleEF	SBUS	9.7440e-003	9.2880e-003
tblVehicleEF	SBUS	7.4900e-004	5.0000e-005
tblVehicleEF	SBUS	3.7080e-003	8.7000e-004
tblVehicleEF	SBUS	0.03	8.3040e-003
tblVehicleEF	SBUS	1.53	0.46
tblVehicleEF	SBUS	1.7580e-003	4.1400e-004
tblVehicleEF	SBUS	0.08	0.07
tblVehicleEF	SBUS	0.02	0.05
tblVehicleEF	SBUS	0.43	0.04
tblVehicleEF	UBUS	0.23	1.86
tblVehicleEF	UBUS	0.05	2.1860e-003
tblVehicleEF	UBUS	3.04	14.11
tblVehicleEF	UBUS	7.59	0.14
tblVehicleEF	UBUS	1,937.16	1,668.67
tblVehicleEF	UBUS	126.43	1.40
tblVehicleEF	UBUS	4.75	0.71
tblVehicleEF	UBUS	13.02	0.02
tblVehicleEF	UBUS	0.54	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.10	5.1160e-003
tblVehicleEF	UBUS	1.3960e-003	1.5000e-005
tblVehicleEF	UBUS	0.23	0.03
tblVehicleEF	UBUS	3.0000e-003	8.3320e-003
tblVehicleEF	UBUS	0.10	4.8930e-003
tblVehicleEF	UBUS	1.2840e-003	1.4000e-005
tblVehicleEF	UBUS	2.5990e-003	6.1000e-005
tblVehicleEF	UBUS	0.04	8.1400e-004
tblVehicleEF	UBUS	1.5170e-003	3.6000e-005
tblVehicleEF	UBUS	0.23	0.03
tblVehicleEF	UBUS	9.4350e-003	4.9280e-003

tblVehicleEF	UBUS	0.65	9.2610e-003
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	1.4020e-003	1.4000e-005
tblVehicleEF	UBUS	2.5990e-003	6.1000e-005
tblVehicleEF	UBUS	0.04	8.1400e-004
tblVehicleEF	UBUS	1.5170e-003	3.6000e-005
tblVehicleEF	UBUS	0.48	1.90
tblVehicleEF	UBUS	9.4350e-003	4.9280e-003
tblVehicleEF	UBUS	0.71	0.01
tblVehicleTrips	ST_TR	6.39	3.64
tblVehicleTrips	ST_TR	42.04	26.46
tblVehicleTrips	SU_TR	5.86	3.34
tblVehicleTrips	SU_TR	20.43	12.86
tblVehicleTrips	WD_TR	6.65	3.79
tblVehicleTrips	WD_TR	44.32	27.90
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2585	0.0490	3.0329	2.5000e-004		0.0180	0.0180		0.0180	0.0180	0.0000	21.2582	21.2582	5.0500e-003	3.0000e-004	21.4736
Energy	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	666.7834	666.7834	0.0509	0.0133	672.0284
Mobile	0.7664	1.2129	6.0321	0.0182	2.1797	0.0134	2.1931	0.5832	0.0126	0.5958	0.0000	1,681.6724	1,681.6724	0.0726	0.0000	1,683.4880
Waste						0.0000	0.0000		0.0000	0.0000	50.9568	0.0000	50.9568	3.0115	0.0000	126.2434
Water						0.0000	0.0000		0.0000	0.0000	10.9861	31.0784	42.0645	0.0409	0.0245	50.3987
Total	**3.0447**	**1.4312**	**9.1400**	**0.0195**	**2.1797**	**0.0451**	**2.2247**	**0.5832**	**0.0442**	**0.6274**	**61.9429**	**2,400.7923**	**2,462.7353**	**3.1809**	**0.0382**	**2,553.6321**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2585	0.0490	3.0329	2.5000e-004		0.0180	0.0180		0.0180	0.0180	0.0000	21.2582	21.2582	5.0500e-003	3.0000e-004	21.4736
Energy	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	195.7321	195.7321	3.7500e-003	3.5900e-003	196.8952
Mobile	0.7664	1.2129	6.0321	0.0182	2.1797	0.0134	2.1931	0.5832	0.0126	0.5958	0.0000	1,681.6724	1,681.6724	0.0726	0.0000	1,683.4880
Waste						0.0000	0.0000		0.0000	0.0000	50.9568	0.0000	50.9568	3.0115	0.0000	126.2434
Water						0.0000	0.0000		0.0000	0.0000	10.9861	31.0784	42.0645	0.0409	0.0245	50.3987
Total	**3.0447**	**1.4312**	**9.1400**	**0.0195**	**2.1797**	**0.0451**	**2.2247**	**0.5832**	**0.0442**	**0.6274**	**61.9429**	**1,929.7410**	**1,991.6840**	**3.1338**	**0.0284**	**2,078.4989**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.62	19.13	1.48	25.52	18.61

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7664	1.2129	6.0321	0.0182	2.1797	0.0134	2.1931	0.5832	0.0126	0.5958	0.0000	1,681.6724	1,681.6724	0.0726	0.0000	1,683.4880
Unmitigated	0.7664	1.2129	6.0321	0.0182	2.1797	0.0134	2.1931	0.5832	0.0126	0.5958	0.0000	1,681.6724	1,681.6724	0.0726	0.0000	1,683.4880

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,546.32	1,485.12	1362.72	3,490,622	3,490,622
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	1,683.21	1,596.33	775.84	2,373,457	2,373,457
Total	3,229.53	3,081.45	2,138.56	5,864,079	5,864,079

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.595423	0.053963	0.171400	0.106522	0.021043	0.005556	0.013639	0.023425	0.001443	0.001178	0.004780	0.000900	0.000728
Enclosed Parking with Elevator	0.595423	0.053963	0.171400	0.106522	0.021043	0.005556	0.013639	0.023425	0.001443	0.001178	0.004780	0.000900	0.000728
Strip Mall	0.595423	0.053963	0.171400	0.106522	0.021043	0.005556	0.013639	0.023425	0.001443	0.001178	0.004780	0.000900	0.000728

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	471.0513	471.0513	0.0471	9.7500e-003	475.1332
NaturalGas Mitigated	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	195.7321	195.7321	3.7500e-003	3.5900e-003	196.8952
NaturalGas Unmitigated	0.0198	0.1694	0.0750	1.0800e-003		0.0137	0.0137		0.0137	0.0137	0.0000	195.7321	195.7321	3.7500e-003	3.5900e-003	196.8952

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.5249e+006	0.0190	0.1624	0.0691	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.1019	188.1019	3.6100e-003	3.4500e-003	189.2197
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	142984	7.7000e-004	7.0100e-003	5.8900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6302	7.6302	1.5000e-004	1.4000e-004	7.6755
Total		**0.0198**	**0.1694**	**0.0750**	**1.0800e-003**		**0.0137**	**0.0137**		**0.0137**	**0.0137**	**0.0000**	**195.7321**	**195.7321**	**3.7600e-003**	**3.5900e-003**	**196.8952**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.5249e+006	0.0190	0.1624	0.0691	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.1019	188.1019	3.6100e-003	3.4500e-003	189.2197
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	142984	7.7000e-004	7.0100e-003	5.8900e-003	4.0000e-005		5.3000e-004	5.3000e-004		5.3000e-004	5.3000e-004	0.0000	7.6302	7.6302	1.5000e-004	1.4000e-004	7.6755
Total		**0.0198**	**0.1694**	**0.0750**	**1.0800e-003**		**0.0137**	**0.0137**		**0.0137**	**0.0137**	**0.0000**	**195.7321**	**195.7321**	**3.7600e-003**	**3.5900e-003**	**196.8952**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Mid Rise	1.68437e+006	221.5646	0.0222	4.5800e-003	223.4846
Enclosed Parking with Elevator	1.2517e+006	164.6503	0.0165	3.4100e-003	166.0771
Strip Mall	644938	84.8364	8.4800e-003	1.7600e-003	85.5715
Total		**471.0513**	**0.0471**	**9.7500e-003**	**475.1332**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Mitigated	2.2585	0.0490	3.0329	2.5000e-004		0.0180	0.0180		0.0180	0.0180	0.0000	21.2582	21.2582	5.0500e-003	3.0000e-004	21.4736
Unmitigated	2.2585	0.0490	3.0329	2.5000e-004		0.0180	0.0180		0.0180	0.0180	0.0000	21.2582	21.2582	5.0500e-003	3.0000e-004	21.4736

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3231					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6500e-003	0.0141	5.9900e-003	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	16.2990	16.2990	3.1000e-004	3.0000e-004	16.3959
Landscaping	0.0909	0.0349	3.0269	1.6000e-004		0.0168	0.0168		0.0168	0.0168	0.0000	4.9592	4.9592	4.7400e-003	0.0000	5.0777
Total	**2.2585**	**0.0490**	**3.0329**	**2.5000e-004**		**0.0180**	**0.0180**		**0.0180**	**0.0180**	**0.0000**	**21.2582**	**21.2582**	**5.0500e-003**	**3.0000e-004**	**21.4736**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3231					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8429					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6500e-003	0.0141	5.9900e-003	9.0000e-005		1.1400e-003	1.1400e-003		1.1400e-003	1.1400e-003	0.0000	16.2990	16.2990	3.1000e-004	3.0000e-004	16.3959

Landscaping	0.0909	0.0349	3.0269	1.6000e-004		0.0168	0.0168		0.0168	0.0168	0.0000	4.9592	4.9592	4.7400e-003	0.0000	5.0777
Total	**2.2585**	**0.0490**	**3.0329**	**2.5000e-004**		**0.0180**	**0.0180**		**0.0180**	**0.0180**	**0.0000**	**21.2582**	**21.2582**	**5.0500e-003**	**3.0000e-004**	**21.4736**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	42.0645	0.0409	0.0245	50.3987
Unmitigated	42.0645	0.0409	0.0245	50.3987

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	26.5828 / 16.7587	36.0417	0.0350	0.0210	43.1767
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.4688 / 2.73894	6.0228	5.8900e-003	3.5300e-003	7.2220

Total		**42.0645**	**0.0409**	**0.0245**	**50.3987**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	26.5828 / 16.7587	36.0417	0.0350	0.0210	43.1767
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	4.4688 / 2.73894	6.0228	5.8900e-003	3.5300e-003	7.2220
Total		**42.0645**	**0.0409**	**0.0245**	**50.3987**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	50.9568	3.0115	0.0000	126.2434
Unmitigated	50.9568	3.0115	0.0000	126.2434

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	187.68	38.0973	2.2515	0.0000	94.3846
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.35	12.8595	0.7600	0.0000	31.8588
Total		**50.9568**	**3.0115**	**0.0000**	**126.2434**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	187.68	38.0973	2.2515	0.0000	94.3846
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	63.35	12.8595	0.7600	0.0000	31.8588
Total		**50.9568**	**3.0115**	**0.0000**	**126.2434**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Attachment 2: EMFAC2017 Worksheets

Source: EMFAC2017 (v1.0.2) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE
Santa Clara	2024	HHDT	Aggregate	Aggregate	Gasoline	4.841478	594.9439	96.86829	3.020299
Santa Clara	2024	HHDT	Aggregate	Aggregate	Diesel	8656.54	1058418	92089.71	2.703911
Santa Clara	2024	HHDT	Aggregate	Aggregate	Natural Ga	370.7651	15119.11	1445.984	1.4401
Santa Clara	2024	LDA	Aggregate	Aggregate	Gasoline	768835.9	26997720	3625782	0.030395
Santa Clara	2024	LDA	Aggregate	Aggregate	Diesel	8011.408	291515.9	38101.09	0.048102
Santa Clara	2024	LDA	Aggregate	Aggregate	Electricity	30564.28	1142137	148311.4	0
Santa Clara	2024	LDT1	Aggregate	Aggregate	Gasoline	77491.49	2505905	359687.4	0.068518
Santa Clara	2024	LDT1	Aggregate	Aggregate	Diesel	31.54053	577.7803	104.3445	1.003934
Santa Clara	2024	LDT1	Aggregate	Aggregate	Electricity	971.3075	39285.07	4827.402	0
Santa Clara	2024	LDT2	Aggregate	Aggregate	Gasoline	257922.1	8298132	1201453	0.060942
Santa Clara	2024	LDT2	Aggregate	Aggregate	Diesel	1933.864	68985.44	9385.607	0.034803
Santa Clara	2024	LDT2	Aggregate	Aggregate	Electricity	3976.567	115838.7	19819.4	0
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Gasoline	16595.29	558796.3	247245.2	0.188441
Santa Clara	2024	LHDT1	Aggregate	Aggregate	Diesel	12077.34	447738.5	151917.7	1.216004
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Gasoline	2318.351	78374.99	34539.98	0.186009
Santa Clara	2024	LHDT2	Aggregate	Aggregate	Diesel	4877.312	176304.8	61350.45	1.033956
Santa Clara	2024	MCY	Aggregate	Aggregate	Gasoline	34431.37	243797	68862.74	1.146289
Santa Clara	2024	MDV	Aggregate	Aggregate	Gasoline	156824.5	4915330	725874.3	0.073555
Santa Clara	2024	MDV	Aggregate	Aggregate	Diesel	4279.344	148384.4	20665.8	0.030793
Santa Clara	2024	MDV	Aggregate	Aggregate	Electricity	2041.893	62655.19	10349.93	0
Santa Clara	2024	MH	Aggregate	Aggregate	Gasoline	2827.424	26048.95	282.8555	0.319474
Santa Clara	2024	MH	Aggregate	Aggregate	Diesel	1087.572	10089.67	108.7572	3.8575
Santa Clara	2024	MHDT	Aggregate	Aggregate	Gasoline	1564.857	81219.94	31309.66	0.31759
Santa Clara	2024	MHDT	Aggregate	Aggregate	Diesel	9624.848	566389.2	95988.07	1.610171
Santa Clara	2024	OBUS	Aggregate	Aggregate	Gasoline	504.7356	23300.26	10098.75	0.360432
Santa Clara	2024	OBUS	Aggregate	Aggregate	Diesel	763.9429	53010.14	7005.878	1.952588
Santa Clara	2024	SBUS	Aggregate	Aggregate	Gasoline	277.2219	12408.76	1108.888	0.391846
Santa Clara	2024	SBUS	Aggregate	Aggregate	Diesel	1011.343	31782.11	11670.76	6.305713
Santa Clara	2024	UBUS	Aggregate	Aggregate	Gasoline	8.427049	1060.813	33.7082	0.179651
Santa Clara	2024	UBUS	Aggregate	Aggregate	Diesel	430.6994	46893.42	1722.798	0.802546
Santa Clara	2024	UBUS	Aggregate	Aggregate	Natural Ga	97.04458	11968.1	388.1783	0.491562

d RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

NOx_IDLEX	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STF	PM2.5_PM	PM2.5_PM	PM10_RUN	PM10_IDLE	PM10_STR
0	0.189099	0.00112	0	0.000551	0.005	0.02646	0.001219	0	0.0006
57.44438	2.359952	0.02415	0.025633	0	0.008883	0.026117	0.025242	0.026792	0
20.42228	0	0.004303	0.025442	0	0.009	0.02646	0.004498	0.026593	0
0	0.173438	0.0012	0	0.001624	0.002	0.01575	0.001305	0	0.001766
0	0	0.004683	0	0	0.002	0.01575	0.004895	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0	0.216191	0.0015	0	0.001965	0.002	0.01575	0.001632	0	0.002137
0	0	0.132094	0	0	0.002	0.01575	0.138066	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0	0.254985	0.001226	0	0.001602	0.002	0.01575	0.001333	0	0.001742
0	0	0.004306	0	0	0.002	0.01575	0.004501	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0.036329	0.492017	0.002119	0	0.000367	0.002	0.03276	0.002304	0	0.0004
1.816109	0	0.017946	0.026621	0	0.003	0.03276	0.018757	0.027824	0
0.035621	0.477152	0.002016	0	0.000324	0.002	0.03822	0.002192	0	0.000352
1.829953	0	0.02008	0.027033	0	0.003	0.03822	0.020988	0.028255	0
0	0.270709	0.001865	0	0.002752	0.001	0.00504	0.001997	0	0.00293
0	0.30496	0.001269	0	0.001735	0.002	0.01575	0.00138	0	0.001887
0	0	0.003552	0	0	0.002	0.01575	0.003712	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0	0.337369	0.001496	0	0.000332	0.003	0.05586	0.001627	0	0.000361
0	0	0.073619	0	0	0.004	0.05586	0.076948	0	0
0.088787	0.357983	0.00128	0	0.000432	0.003	0.05586	0.001392	0	0.000469
5.459844	2.136352	0.007492	0.004673	0	0.003	0.05586	0.00783	0.004884	0
0.065159	0.318556	0.00103	0	0.000226	0.003	0.05586	0.00112	0	0.000245
8.368625	2.211523	0.009711	0.002619	0	0.003	0.05586	0.01015	0.002738	0
0.925198	0.582393	0.001195	0	0.000512	0.002	0.3192	0.0013	0	0.000557
43.19427	0.882346	0.039225	0.043673	0	0.003	0.3192	0.040998	0.045648	0
0	0.688867	0.002209	0	0.000888	0.003	0.05586	0.002402	0	0.000966
0	0	0.005646	0	0	0.008399	0.029403	0.005901	0	0
0	0	0.003197	0	0	0.008538	0.028723	0.003341	0	0

PM10_PM	PM10_PMI	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX
0.02	0.06174	1864.547	0	45.62595	0.076898	0	0.000429	0.12764	0
0.035534	0.06094	1388.989	11174.98	0	0.001112	0.214832	0	0.21833	1.756551
0.036	0.06174	3139.748	3971.23	0	3.408101	1.228196	0	0.640058	0.809561
0.008	0.03675	244.9997	0	52.35424	0.001806	0	0.046341	0.003843	0
0.008	0.03675	190.0661	0	0	0.000484	0	0	0.029876	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.008	0.03675	285.2357	0	61.12483	0.003656	0	0.0584	0.005889	0
0.008	0.03675	393.8059	0	0	0.007979	0	0	0.061901	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.008	0.03675	306.3042	0	66.94798	0.002992	0	0.063272	0.005453	0
0.008	0.03675	261.017	0	0	0.000618	0	0	0.041028	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.008	0.07644	981.413	118.8928	18.64229	0.008635	0.116255	0.022385	0.011684	0.00305
0.012	0.07644	527.1415	129.4169	0	0.006889	0.005098	0	0.082859	0.020343
0.008	0.08918	1117.473	136.319	21.08444	0.006588	0.114918	0.021458	0.012162	0.002973
0.012	0.08918	593.7458	208.0708	0	0.006684	0.005098	0	0.093329	0.032706
0.004	0.01176	210.0772	0	60.71341	0.325313	0	0.253919	0.066025	0
0.008	0.03675	370.2473	0	81.24522	0.003533	0	0.07385	0.006301	0
0.008	0.03675	340.7089	0	0	0.00042	0	0	0.053555	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.012	0.13034	1698.665	0	25.10838	0.011423	0	0.03111	0.021443	0
0.016	0.13034	992.182	0	0	0.004739	0	0	0.155957	0
0.012	0.13034	1664.466	518.4053	37.21256	0.009834	0.269491	0.03713	0.017321	0.007911
0.012	0.13034	997.0565	869.0377	0	0.000527	0.003515	0	0.156723	0.136601
0.012	0.13034	1712.694	370.3334	25.70448	0.010554	0.201432	0.02907	0.019268	0.00573
0.012	0.13034	1156.149	1829.903	0	0.000579	0.025071	0	0.181731	0.287635
0.008	0.7448	849.9257	2540.147	47.46214	0.010004	2.441578	0.057304	0.022787	0.088525
0.012	0.7448	1127.045	3685.79	0	0.004462	0.012671	0	0.177156	0.579355
0.012	0.13034	1956.507	0	88.60685	0.007013	0	0.097882	0.017812	0
0.033598	0.068607	1480.079	0	0	0.077245	0	0	0.232648	0
0.034153	0.06702	2024.066	0	0	6.451003	0	0	0.412619	0

N2O_STRE	ROG_RUNE	ROG_IDLEX	ROG_STRE	ROG_HOTS	ROG_RUNI	ROG_RESTI	ROG_DIUR	TOG_RUNE	TOG_IDLEX
0.006341	0.362275	0	0.002245	0.090273	0.457367	0.02213	0.039608	0.528631	0
0	0.023933	4.625274	0	0	0	0	0	0.027246	5.265522
0	0.135992	0.039404	0	0	0	0	0	3.577682	1.278365
0.024653	0.006637	0	0.202005	0.088504	0.205724	0.155728	0.174002	0.009684	0
0	0.010417	0	0	0	0	0	0	0.011859	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.026446	0.015495	0	0.278192	0.147313	0.544925	0.287739	0.351787	0.022607	0
0	0.171786	0	0	0	0	0	0	0.195567	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.030095	0.011904	0	0.290499	0.118569	0.418242	0.272186	0.28339	0.017369	0
0	0.013297	0	0	0	0	0	0	0.015138	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.039132	0.041266	0.416309	0.11274	0.115621	0.802453	0.023685	0.04598	0.060215	0.607477
0	0.148312	0.10976	0	0	0	0	0	0.168843	0.124954
0.037878	0.028759	0.40841	0.106844	0.107467	0.691039	0.021248	0.040757	0.041965	0.595951
0	0.143898	0.10976	0	0	0	0	0	0.163818	0.124954
0.015366	2.190481	0	1.930344	0.676373	1.887358	0.97629	1.802995	2.721006	0
0.032254	0.014431	0	0.358405	0.133918	0.442951	0.315236	0.324744	0.021047	0
0	0.009041	0	0	0	0	0	0	0.010293	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.036462	0.047898	0	0.127627	0.075126	1.794574	0.031457	0.088456	0.069892	0
0	0.102018	0	0	0	0	0	0	0.116141	0
0.029454	0.046731	1.017203	0.195989	0.074177	0.415581	0.016077	0.031122	0.06819	1.484301
0	0.01135	0.075674	0	0	0	0	0	0.012921	0.086149
0.026194	0.04937	0.747749	0.148852	0.027254	0.303972	0.016446	0.036927	0.07204	1.091114
0	0.01246	0.539782	0	0	0	0	0	0.014185	0.6145
0.054796	0.049026	10.62205	0.32698	0.063489	0.424105	0.011364	0.026144	0.071538	15.49967
0	0.09606	0.272808	0	0	0	0	0	0.109357	0.310572
0.068509	0.022728	0	0.407643	0.01024	0.051815	0.002284	0.005364	0.033164	0
0	0.001104	0	0	0	0	0	0	0.078834	0
0	0.092172	0	0	0	0	0	0	6.583722	0

TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_RESTI	TOG_DIURI	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX
0.002458	0.090273	0.457367	0.02213	0.039608	27.06461	0	5.743732	0.018451	0
0	0	0	0	0	0.237639	67.56762	0	0.013122	0.105576
0	0	0	0	0	10.81294	21.6569	0	0	0
0.22117	0.088504	0.205724	0.155728	0.174002	0.54881	0	2.188955	0.002424	0
0	0	0	0	0	0.179098	0	0	0.001797	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.304585	0.147313	0.544925	0.287739	0.351787	0.864479	0	2.286362	0.002823	0
0	0	0	0	0	0.993473	0	0	0.003723	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.31806	0.118569	0.418242	0.272186	0.28339	0.750324	0	2.754987	0.003031	0
0	0	0	0	0	0.124646	0	0	0.002468	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.123436	0.115621	0.802453	0.023685	0.04598	0.775411	3.757388	1.688646	0.009712	0.001177
0	0	0	0	0	0.625521	0.909745	0	0.004983	0.001223
0.11698	0.107467	0.691039	0.021248	0.040757	0.534699	3.762482	1.666987	0.011058	0.001349
0	0	0	0	0	0.61131	0.909745	0	0.005613	0.001967
2.101179	0.676373	1.887358	0.97629	1.802995	18.59611	0	9.061179	0.002079	0
0.392407	0.133918	0.442951	0.315236	0.324744	0.809607	0	3.072017	0.003664	0
0	0	0	0	0	0.1773	0	0	0.003221	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.139736	0.075126	1.794574	0.031457	0.088456	1.158649	0	2.813821	0.01681	0
0	0	0	0	0	0.353157	0	0	0.00938	0
0.214584	0.074177	0.415581	0.016077	0.031122	1.055715	15.16855	4.34781	0.016471	0.00513
0	0	0	0	0	0.114514	2.701556	0	0.00942	0.00821
0.162974	0.027254	0.303972	0.016446	0.036927	1.073358	5.783505	3.116445	0.016948	0.003665
0	0	0	0	0	0.143603	9.166694	0	0.010923	0.017288
0.358002	0.063489	0.424105	0.011364	0.026144	1.061031	82.12266	8.250612	0.008411	0.025137
0	0	0	0	0	0.272311	6.223874	0	0.010648	0.034822
0.446318	0.01024	0.051815	0.002284	0.005364	0.280937	0	8.852622	0.019361	0
0	0	0	0	0	0.131094	0	0	0.013992	0
0	0	0	0	0	50.12428	0	0	0	0

SOx_STREX
0.000452
0
0
0.000518
0
0
0.000605
0
0
0.000663
0
0
0.000184
0
0.000209
0
0.000601
0.000804
0
0
0.000248
0
0.000368
0
0.000254
0
0.00047
0
0.000877
0
0

Source: EMFAC2017 (v1.0.2) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNE
Santa Clara	2030	HHDT	Aggregate	Aggregate	Gasoline	6.644908	846.0095	132.9513	2.895279
Santa Clara	2030	HHDT	Aggregate	Aggregate	Diesel	9431.66	1177485	101453.9	2.539781
Santa Clara	2030	HHDT	Aggregate	Aggregate	Natural Ga	400.4237	16329.01	1561.653	0.881174
Santa Clara	2030	LDA	Aggregate	Aggregate	Gasoline	869969.1	28403709	4092414	0.020358
Santa Clara	2030	LDA	Aggregate	Aggregate	Diesel	10023.63	337674.2	47693.27	0.01676
Santa Clara	2030	LDA	Aggregate	Aggregate	Electricity	46172.96	1625146	221619.4	0
Santa Clara	2030	LDT1	Aggregate	Aggregate	Gasoline	88972.38	2670256	412660.2	0.034308
Santa Clara	2030	LDT1	Aggregate	Aggregate	Diesel	12.41764	352.1646	54.72798	0.189506
Santa Clara	2030	LDT1	Aggregate	Aggregate	Electricity	2180.044	81488.93	10672.84	0
Santa Clara	2030	LDT2	Aggregate	Aggregate	Gasoline	281546.9	8446247	1307139	0.035247
Santa Clara	2030	LDT2	Aggregate	Aggregate	Diesel	2576.298	81354.46	12261.45	0.02908
Santa Clara	2030	LDT2	Aggregate	Aggregate	Electricity	8320.478	213767.2	40645.17	0
Santa Clara	2030	LHDT1	Aggregate	Aggregate	Gasoline	17444.25	563109.1	259893.3	0.098098
Santa Clara	2030	LHDT1	Aggregate	Aggregate	Diesel	14887.61	510107.2	187267.4	0.522674
Santa Clara	2030	LHDT2	Aggregate	Aggregate	Gasoline	2535.293	81915.35	37772.09	0.091162
Santa Clara	2030	LHDT2	Aggregate	Aggregate	Diesel	6126.051	201454.9	77058.01	0.503536
Santa Clara	2030	MCY	Aggregate	Aggregate	Gasoline	38839.87	253703.2	77679.74	1.137409
Santa Clara	2030	MDV	Aggregate	Aggregate	Gasoline	173606	5113918	803848	0.03715
Santa Clara	2030	MDV	Aggregate	Aggregate	Diesel	5652.323	175214.3	26820.46	0.016338
Santa Clara	2030	MDV	Aggregate	Aggregate	Electricity	5412.776	143464.5	26723.4	0
Santa Clara	2030	MH	Aggregate	Aggregate	Gasoline	2781.183	26082.35	278.2296	0.161957
Santa Clara	2030	MH	Aggregate	Aggregate	Diesel	1271.562	11026.54	127.1562	3.194675
Santa Clara	2030	MHDT	Aggregate	Aggregate	Gasoline	1942.274	96462.8	38861.02	0.137179
Santa Clara	2030	MHDT	Aggregate	Aggregate	Diesel	11245.42	599136.6	111242.1	1.636194
Santa Clara	2030	OBUS	Aggregate	Aggregate	Gasoline	521.2442	22324.56	10429.05	0.201397
Santa Clara	2030	OBUS	Aggregate	Aggregate	Diesel	845.8557	51263.29	7867.551	1.991442
Santa Clara	2030	SBUS	Aggregate	Aggregate	Gasoline	362.3014	15198.78	1449.205	0.285961
Santa Clara	2030	SBUS	Aggregate	Aggregate	Diesel	980.5629	30722.11	11315.56	4.472027
Santa Clara	2030	UBUS	Aggregate	Aggregate	Gasoline	8.45001	1063.703	33.80004	0.336697
Santa Clara	2030	UBUS	Aggregate	Aggregate	Diesel	376.8943	42036.62	1507.577	0.804174
Santa Clara	2030	UBUS	Aggregate	Aggregate	Natural Ga	152.2876	16985.28	609.1502	0.487691

d RUNLOSS, g/vehicle/day for IDLEX, RESTLOSS and DIURN

NOx_IDLEX	NOx_STRE	PM2.5_RU	PM2.5_IDL	PM2.5_STF	PM2.5_PM	PM2.5_PM	PM10_RUN	PM10_IDLE	PM10_STR
0	0.044486	0.001084	0	0.000414	0.005	0.02646	0.001179	0	0.00045
56.05241	2.353151	0.023044	0.021785	0	0.008907	0.026186	0.024086	0.02277	0
19.09434	0	0.003462	0.015749	0	0.009	0.02646	0.003619	0.016461	0
0	0.132956	0.000879	0	0.001249	0.002	0.01575	0.000956	0	0.001359
0	0	0.001829	0	0	0.002	0.01575	0.001912	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0	0.154254	0.000998	0	0.001379	0.002	0.01575	0.001085	0	0.001499
0	0	0.017188	0	0	0.002	0.01575	0.017965	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0	0.174198	0.000925	0	0.001282	0.002	0.01575	0.001006	0	0.001394
0	0	0.003937	0	0	0.002	0.01575	0.004115	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0.030587	0.387515	0.002081	0	0.000333	0.002	0.03276	0.002264	0	0.000362
1.343027	0	0.011738	0.026289	0	0.003	0.03276	0.012269	0.027477	0
0.030032	0.379653	0.001975	0	0.000297	0.002	0.03822	0.002148	0	0.000323
1.378592	0	0.017789	0.026933	0	0.003	0.03822	0.018593	0.028151	0
0	0.270173	0.001994	0	0.002676	0.001	0.00504	0.002138	0	0.002862
0	0.190209	0.00093	0	0.001318	0.002	0.01575	0.001012	0	0.001433
0	0	0.001999	0	0	0.002	0.01575	0.00209	0	0
0	0	0	0	0	0.002	0.01575	0	0	0
0	0.344848	0.001294	0	0.000284	0.003	0.05586	0.001408	0	0.000309
0	0	0.048471	0	0	0.004	0.05586	0.050662	0	0
0.089333	0.328382	0.001276	0	0.000397	0.003	0.05586	0.001388	0	0.000432
4.546441	2.164606	0.007568	0.002068	0	0.003	0.05586	0.00791	0.002162	0
0.065222	0.308429	0.001191	0	0.000252	0.003	0.05586	0.001295	0	0.000274
9.302951	2.216948	0.010285	0.002947	0	0.003	0.05586	0.01075	0.003081	0
0.92653	0.616868	0.001215	0	0.000547	0.002	0.3192	0.001322	0	0.000595
34.94152	1.257143	0.029756	0.025511	0	0.003	0.3192	0.031102	0.026664	0
0	0.964336	0.002209	0	0.000888	0.003	0.05586	0.002402	0	0.000966
0	0	0.005656	0	0	0.008428	0.029265	0.005912	0	0
0	0	0.003174	0	0	0.008428	0.029265	0.003317	0	0

PM10_PM	PM10_PMI	CO2_RUNE	CO2_IDLEX	CO2_STRE	CH4_RUNE	CH4_IDLEX	CH4_STRE	N2O_RUNE	N2O_IDLEX
0.02	0.06174	1677.599	0	40.07141	0.06849	0	0.000337	0.127319	0
0.035627	0.061101	1202.821	10016.29	0	0.001063	0.214358	0	0.189067	1.574421
0.036	0.06174	2899.524	3653.632	0	3.225286	1.19295	0	0.591087	0.744817
0.008	0.03675	211.6944	0	44.94162	0.001023	0	0.030835	0.003085	0
0.008	0.03675	166.1368	0	0	0.000273	0	0	0.026114	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.008	0.03675	248.8135	0	52.89319	0.001722	0	0.036164	0.003879	0
0.008	0.03675	322.0531	0	0	0.001569	0	0	0.050622	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.008	0.03675	256.344	0	55.96845	0.00178	0	0.043514	0.003847	0
0.008	0.03675	226.4921	0	0	0.000595	0	0	0.035601	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.008	0.07644	897.5407	110.5325	17.36665	0.004317	0.101968	0.015524	0.006844	0.002802
0.012	0.07644	478.8761	118.3357	0	0.006165	0.005098	0	0.075273	0.018601
0.008	0.08918	1021.816	126.3902	19.57212	0.00327	0.10112	0.014626	0.00699	0.00275
0.012	0.08918	540.7481	191.3797	0	0.006181	0.005098	0	0.084998	0.030082
0.004	0.01176	209.7572	0	59.22586	0.319087	0	0.24786	0.065566	0
0.008	0.03675	309.7804	0	67.68816	0.001872	0	0.04685	0.004005	0
0.008	0.03675	295.1303	0	0	0.000296	0	0	0.04639	0
0.008	0.03675	0	0	0	0	0	0	0	0
0.012	0.13034	1534.746	0	22.64387	0.005412	0	0.028477	0.014768	0
0.016	0.13034	913.8987	0	0	0.004117	0	0	0.143652	0
0.012	0.13034	1512.526	477.0555	33.02741	0.004329	0.277482	0.032379	0.010371	0.008413
0.012	0.13034	909.8747	786.5238	0	0.000503	0.003226	0	0.14302	0.123631
0.012	0.13034	1542.791	344.1269	23.61734	0.005871	0.202191	0.026706	0.012891	0.005853
0.012	0.13034	1066.293	1893.973	0	0.000596	0.028932	0	0.167606	0.297706
0.008	0.7448	803.9675	2414.339	44.56576	0.00626	2.435971	0.055823	0.018735	0.089714
0.012	0.7448	1052.894	3501.127	0	0.003486	0.012263	0	0.1655	0.550328
0.012	0.13034	1956.157	0	89.19596	0.006892	0	0.139066	0.027885	0
0.03371	0.068284	1523.264	0	0	0.077448	0	0	0.239436	0
0.03371	0.068284	2010.534	0	0	6.385838	0	0	0.40986	0

N2O_STRE	ROG_RUNE	ROG_IDLEX	ROG_STRE	ROG_HOTS	ROG_RUNL	ROG_RESTI	ROG_DIUR	TOG_RUNE	TOG_IDLEX
0.001575	0.302922	0	0.001761	0.044849	0.220711	0.012382	0.020645	0.442024	0
0	0.022896	4.615071	0	0	0	0	0	0.026066	5.253907
0	0.090199	0.028054	0	0	0	0	0	3.341906	1.230036
0.020493	0.003388	0	0.12606	0.065117	0.180811	0.11416	0.123291	0.004944	0
0	0.005885	0	0	0	0	0	0	0.006699	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.021779	0.00667	0	0.15755	0.095382	0.371981	0.194977	0.219194	0.009733	0
0	0.033785	0	0	0	0	0	0	0.038462	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.023481	0.006634	0	0.189401	0.09208	0.348635	0.233116	0.234964	0.00968	0
0	0.01282	0	0	0	0	0	0	0.014595	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.033538	0.018245	0.350811	0.075233	0.094381	0.739315	0.019801	0.035959	0.026623	0.511903
0	0.13273	0.10976	0	0	0	0	0	0.151104	0.124954
0.032936	0.012455	0.344716	0.06918	0.074032	0.436992	0.016932	0.02908	0.018175	0.503009
0	0.133066	0.10976	0	0	0	0	0	0.151486	0.124954
0.015364	2.128511	0	1.877593	0.631299	1.487321	0.946881	1.786807	2.666273	0
0.024192	0.007071	0	0.21174	0.103941	0.361114	0.278651	0.281249	0.010317	0
0	0.006382	0	0	0	0	0	0	0.007265	0
0	0	0	0	0.004888	0	0.00456	0.017501	0	0
0.039513	0.01789	0	0.108156	0.041368	0.780207	0.020421	0.050661	0.026105	0
0	0.088635	0	0	0	0	0	0	0.100905	0
0.029895	0.018098	1.025296	0.159937	0.053505	0.276198	0.013009	0.02236	0.026409	1.49611
0	0.010837	0.069445	0	0	0	0	0	0.012337	0.079058
0.026143	0.025703	0.748687	0.134449	0.027407	0.319238	0.017082	0.037276	0.037506	1.092483
0	0.012842	0.6229	0	0	0	0	0	0.01462	0.709124
0.057177	0.030067	10.64152	0.317303	0.073145	0.474779	0.014584	0.030637	0.043873	15.52808
0	0.075046	0.264022	0	0	0	0	0	0.085434	0.300569
0.079916	0.022728	0	0.589249	0.05182	0.313542	0.009109	0.015639	0.033164	0
0	0.001107	0	0	0	0	0	0	0.079041	0
0	0.091241	0	0	0	0	0	0	6.517216	0

TOG_STRE	TOG_HOTS	TOG_RUNL	TOG_RESTI	TOG_DIURI	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNE	SOx_IDLEX
0.001928	0.044849	0.220711	0.012382	0.020645	28.21474	0	5.186707	0.016601	0
0	0	0	0	0	0.238872	67.80499	0	0.011364	0.094629
0	0	0	0	0	11.01311	21.88788	0	0	0
0.13802	0.065117	0.180811	0.11416	0.123291	0.43107	0	1.801842	0.002095	0
0	0	0	0	0	0.146966	0	0	0.001571	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.172497	0.095382	0.371981	0.194977	0.219194	0.548445	0	1.868724	0.002462	0
0	0	0	0	0	0.286183	0	0	0.003045	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.20737	0.09208	0.348635	0.233116	0.234964	0.568541	0	2.344012	0.002537	0
0	0	0	0	0	0.129762	0	0	0.002141	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.082371	0.094381	0.739315	0.019801	0.035959	0.368714	3.768698	1.531971	0.008882	0.001094
0	0	0	0	0	0.579164	0.909745	0	0.004527	0.001119
0.075743	0.074032	0.436992	0.016932	0.02908	0.249204	3.775612	1.472175	0.010112	0.001251
0	0	0	0	0	0.586662	0.909745	0	0.005112	0.001809
2.04481	0.631299	1.487321	0.946881	1.786807	17.60732	0	9.199577	0.002076	0
0.231829	0.103941	0.361114	0.278651	0.281249	0.571385	0	2.441594	0.003066	0
0	0	0	0	0	0.160558	0	0	0.00279	0
0	0.004888	0	0.00456	0.017501	0	0	0	0	0
0.118417	0.041368	0.780207	0.020421	0.050661	0.321425	0	2.382509	0.015188	0
0	0	0	0	0	0.288665	0	0	0.00864	0
0.175111	0.053505	0.276198	0.013009	0.02236	0.365535	15.26266	3.370143	0.014968	0.004721
0	0	0	0	0	0.11784	2.775159	0	0.008596	0.007431
0.147204	0.027407	0.319238	0.017082	0.037276	0.529537	5.789149	2.766701	0.015267	0.003405
0	0	0	0	0	0.14672	10.36618	0	0.010074	0.017893
0.347407	0.073145	0.474779	0.014584	0.030637	0.649967	82.24088	7.563743	0.007956	0.023892
0	0	0	0	0	0.238791	7.720739	0	0.009947	0.033077
0.645153	0.05182	0.313542	0.009109	0.015639	0.405122	0	8.852622	0.019358	0
0	0	0	0	0	0.131472	0	0	0.0144	0
0	0	0	0	0	49.56612	0	0	0	0

SOx_STREX
0.000397
0
0
0.000445
0
0
0.000523
0
0
0.000554
0
0
0.000172
0
0.000194
0
0.000586
0.00067
0
0
0.000224
0
0.000327
0
0.000234
0
0.000441
0
0.000883
0
0

Season	EmissionTy	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.004988	0.003038	0.003579	0.024725	0.007064	0	0	0.053967	0
A	CH4_RUNE	0.00172	0.003601	0.002932	0.0034	0.007858	0.006654	0.001694	0.049109	0.003624	1.349012	0.325313	0.006018	0.009557
A	CH4_STREX	0.044075	0.05761	0.06177	0.070824	0.013865	0.007729	0.009132	4.44E-07	0.017163	0.001538	0.253919	0.004972	0.02247
A	CO_IDLEX	0	0	0	0	0.18374	0.137239	0.390727	6.332535	0.580075	0	0	2.273981	0
A	CO_RUNEX	0.525274	0.854913	0.738224	0.784848	0.708735	0.587734	0.232554	0.401352	0.42749	10.11873	18.59611	0.493783	0.933761
A	CO_STREX	2.091078	2.265361	2.701442	2.959095	1.045963	0.600453	1.069371	0.005942	1.839982	0.139137	9.061179	0.715904	2.032378
A	CO2_NBIO_	0	0	0	0	8.858719	13.87898	72.07972	1048.877	92.65691	0	0	346.7845	0
A	CO2_NBIO_	234.5944	280.8587	301.7532	364.8671	779.3387	754.9172	1080.76	1413.896	1326.082	1597.162	210.0772	1049.23	1501.42
A	CO2_NBIO_	49.79417	60.29808	65.35922	77.91596	11.54721	7.594669	9.152658	0.047203	15.17619	1.392642	60.71341	4.118282	18.13538
A	NOX_IDLEX	0	0	0	0	0.05646	0.093939	0.413905	5.39173	0.37569	0	0	3.438336	0
A	NOX_RUNE	0.029391	0.067754	0.059969	0.071504	0.645533	0.773009	1.448062	2.686297	1.466446	0.729407	1.146289	4.645105	1.307268
A	NOX_STREX	0.165155	0.213522	0.249233	0.292815	0.30476	0.171871	1.698951	2.321261	1.093896	0.010827	0.270709	0.856319	0.243677
A	PM10_IDLE	0	0	0	0	0.000842	0.001437	0.000369	0.002582	0.000122	0	0	0.003612	0
A	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034	0.060952	0.13034	0.069383	0.01176	0.7448	0.13034
A	PM10_PM	0.008	0.008	0.008	0.008	0.009779	0.010769	0.012	0.035532	0.012	0.033326	0.004	0.010877	0.013117
A	PM10_RUN	0.001296	0.001646	0.001347	0.001438	0.009623	0.015204	0.007023	0.024937	0.007393	0.005328	0.001997	0.029851	0.022656
A	PM10_STR	0.00168	0.002108	0.001701	0.00181	0.000247	0.000127	0.000115	6.20E-07	0.000145	1.52E-05	0.00293	4.83E-05	0.000261
A	PM25_IDLE	0	0	0	0	0.000805	0.001375	0.000353	0.002471	0.000117	0	0	0.003456	0
A	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586	0.026122	0.05586	0.029736	0.00504	0.3192	0.05586
A	PM25_PM	0.002	0.002	0.002	0.002	0.002445	0.002692	0.003	0.008883	0.003	0.008332	0.001	0.002719	0.003279
A	PM25_RUN	0.001194	0.001515	0.00124	0.001326	0.009159	0.014521	0.006713	0.023858	0.00706	0.005096	0.001865	0.028546	0.021632
A	PM25_STR	0.001544	0.001938	0.001564	0.001664	0.000228	0.000117	0.000106	5.71E-07	0.000133	1.40E-05	0.002752	4.44E-05	0.00024
A	ROG_DIUR	0.035268	0.074886	0.059509	0.0674	0.001912	0.000985	0.000383	2.05E-06	0.00109	2.11E-05	1.802995	0.000567	0.638647
A	ROG_HTSK	0.084451	0.14553	0.11595	0.128626	0.071617	0.03871	0.018244	9.34E-05	0.016091	0.000161	0.676373	0.005509	0.054262
A	ROG_IDLEX	0	0	0	0	0.020629	0.015457	0.018226	0.427773	0.046173	0	0	0.252008	0
A	ROG_REST	0.031475	0.061226	0.057117	0.065393	0.000985	0.000514	0.000198	1.14E-06	0.000485	8.98E-06	0.97629	0.000247	0.227116
A	ROG_RUNE	0.006416	0.015308	0.011766	0.014114	0.088883	0.108465	0.015787	0.025698	0.02373	0.019675	2.190481	0.082853	0.063008
A	ROG_RUNL	0.19586	0.538092	0.408725	0.425225	0.497047	0.248914	0.102215	0.000473	0.179468	0.000814	1.887358	0.036799	1.296192
A	ROG_STRE	0.192338	0.274731	0.283917	0.344096	0.069832	0.038485	0.048205	2.32E-06	0.087883	0.006407	1.930344	0.028372	0.092183
A	SO2_IDLEX	0	0	0	0	8.59E-05	0.000133	0.000684	0.009761	0.00088	0	0	0.003301	0
A	SO2_RUNE	9.32E-05	0.002619	0.010304	0.003606	0.007608	0.007289	0.010304	0.012941	0.012763	0.011293	0.002079	0.01002	0.014735
A	SO2_STREX	0	0	9.06E-05	0.000771	0.000114	7.52E-05	9.06E-05	4.67E-07	0.00015	1.38E-05	0.000601	4.08E-05	0.000179
A	TOG_DIUR	0.035268	0.074886	0.059509	0.0674	0.001912	0.000985	0.000383	2.05E-06	0.00109	2.11E-05	1.802995	0.000567	0.638647
A	TOG_HTSK	0.084451	0.14553	0.11595	0.128626	0.071617	0.03871	0.018244	9.34E-05	0.016091	0.000161	0.676373	0.005509	0.054262
A	TOG_IDLEX	0	0	0	0	0.029037	0.020764	0.02476	0.491871	0.059643	0	0	0.360804	0
A	TOG_RESTI	0.031475	0.061226	0.057117	0.065393	0.000985	0.000514	0.000198	1.14E-06	0.000485	8.98E-06	0.97629	0.000247	0.227116
A	TOG_RUNE	0.009328	0.022322	0.017133	0.020501	0.108536	0.126319	0.019853	0.077498	0.03185	1.377227	2.721006	0.098738	0.082805
A	TOG_RUNL	0.19586	0.538092	0.408725	0.425225	0.497047	0.248914	0.102215	0.000473	0.179468	0.000814	1.887358	0.036799	1.296192
A	TOG_STRE	0.210586	0.300795	0.310854	0.376741	0.076457	0.042137	0.052778	2.54E-06	0.096221	0.007015	2.101179	0.031064	0.100929

Season	EmissionTy	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.004148	0.002505	0.003832	0.024231	0.007098	0	0	0.070082	0
A	CH4_RUNE	0.000959	0.001671	0.001726	0.001772	0.005195	0.005339	0.001034	0.045181	0.002197	1.859484	0.319087	0.004404	0.005027
A	CH4_STRE)	0.028931	0.035248	0.041821	0.043924	0.009023	0.004811	0.008383	4.35E-07	0.015222	0.002186	0.24786	0.006338	0.019545
A	CO_IDLEX	0	0	0	0	0.17731	0.131894	0.405402	6.2849	0.644155	0	0	2.927328	0
A	CO_RUNEX	0.411156	0.540474	0.559142	0.551517	0.468742	0.489111	0.152189	0.405949	0.262856	14.11073	17.60732	0.374881	0.311691
A	CO_STREX	1.716961	1.849789	2.287973	2.324828	0.890393	0.484256	0.872515	0.006685	1.577018	0.139137	9.199577	0.858725	1.635194
A	CO2_NBIO_	0	0	0	0	8.251826	13.00041	65.09769	930.0497	97.36242	0	0	337.4754	0
A	CO2_NBIO_	199.8584	241.4555	249.7974	301.1272	698.5465	679.813	993.4479	1226.348	1210.85	1668.671	209.7572	970.5049	1350.267
A	CO2_NBIO_	42.16672	51.55301	53.79124	63.46105	10.09364	6.438033	8.550649	0.051649	13.46187	1.401901	59.22586	5.059627	15.54123
A	NOX_IDLEX	0	0	0	0	0.045908	0.074209	0.341766	5.199427	0.431935	0	0	2.710433	0
A	NOX_RUNE	0.019319	0.033468	0.034489	0.035665	0.299902	0.384329	1.428316	2.517362	1.448391	0.706433	1.137409	3.086533	1.063099
A	NOX_STRE)	0.125333	0.151052	0.168209	0.179169	0.225227	0.124883	1.689216	2.314549	1.129093	0.015157	0.270173	1.184451	0.23668
A	PM10_IDLE	0	0	0	0	0.000915	0.001502	0.000162	0.002146	0.000142	0	0	0.002048	0
A	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034	0.06111	0.13034	0.069383	0.01176	0.7448	0.13034
A	PM10_PM"	0.008	0.008	0.008	0.008	0.009901	0.010844	0.012	0.035621	0.012	0.033326	0.004	0.010676	0.013189
A	PM10_RUN	0.000929	0.00107	0.001025	0.001034	0.007019	0.013839	0.007006	0.02379	0.007882	0.005116	0.002138	0.021245	0.016043
A	PM10_STR	0.001275	0.001461	0.00134	0.001344	0.00021	0.000106	0.000112	5.80E-07	0.000156	1.52E-05	0.002862	6.76E-05	0.000212
A	PM25_IDLE	0	0	0	0	0.000875	0.001437	0.000155	0.002053	0.000136	0	0	0.00196	0
A	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586	0.02619	0.05586	0.029736	0.00504	0.3192	0.05586
A	PM25_PM"	0.002	0.002	0.002	0.002	0.002475	0.002711	0.003	0.008905	0.003	0.008332	0.001	0.002669	0.003297
A	PM25_RUN	0.000855	0.000984	0.000944	0.000954	0.006671	0.013218	0.006696	0.022761	0.007526	0.004893	0.001994	0.02031	0.015312
A	PM25_STR	0.001172	0.001344	0.001232	0.001236	0.000193	9.76E-05	0.000103	5.33E-07	0.000144	1.40E-05	0.002676	6.22E-05	0.000195
A	ROG_DIUR	0.024903	0.046388	0.048996	0.057349	0.001403	0.000642	0.000289	1.33E-06	0.001062	6.14E-05	1.786807	0.00087	0.347564
A	ROG_HTSK	0.061657	0.093564	0.089096	0.0981	0.054855	0.024352	0.013852	5.78E-05	0.015622	0.000814	0.631299	0.008304	0.028392
A	ROG_IDLEX	0	0	0	0	0.01734	0.013466	0.01847	0.4221	0.050126	0	0	0.322319	0
A	ROG_REST	0.022934	0.041206	0.048532	0.056738	0.000772	0.000374	0.000168	7.98E-07	0.000487	3.58E-05	0.946881	0.000414	0.1401
A	ROG_RUNE	0.003247	0.0065	0.006553	0.006887	0.072661	0.0982	0.011844	0.024014	0.016744	0.026969	2.128511	0.060159	0.038911
A	ROG_RUNL	0.170512	0.364405	0.336782	0.340289	0.429696	0.143744	0.071507	0.000284	0.181965	0.004928	1.487321	0.053902	0.535482
A	ROG_STRE)	0.118715	0.154126	0.182707	0.199251	0.043726	0.022756	0.041407	2.27E-06	0.076636	0.009261	1.877593	0.036024	0.074231
A	SO2_IDLEX	0	0	0	0	7.99E-05	0.000124	0.000618	0.008653	0.000924	0	0	0.003219	0
A	SO2_RUNE	9.00E-05	0.002567	0.00948	0.002976	0.006812	0.006557	0.00948	0.011212	0.011649	0.010417	0.002076	0.009288	0.013242
A	SO2_STREX	0	0	8.46E-05	0.000628	9.99E-05	6.37E-05	8.46E-05	5.11E-07	0.000133	1.39E-05	0.000586	5.01E-05	0.000154
A	TOG_DIUR	0.024903	0.046388	0.048996	0.057349	0.001403	0.000642	0.000289	1.33E-06	0.001062	6.14E-05	1.786807	0.00087	0.347564
A	TOG_HTSK	0.061657	0.093564	0.089096	0.0981	0.054855	0.024352	0.013852	5.78E-05	0.015622	0.000814	0.631299	0.008304	0.028392
A	TOG_IDLEX	0	0	0	0	0.02413	0.017772	0.025282	0.48518	0.063906	0	0	0.463821	0
A	TOG_RESTI	0.022934	0.041206	0.048532	0.056738	0.000772	0.000374	0.000168	7.98E-07	0.000487	3.58E-05	0.946881	0.000414	0.1401
A	TOG_RUNE	0.004716	0.009483	0.009524	0.009983	0.08579	0.112949	0.014288	0.071682	0.021563	1.898202	2.666273	0.071678	0.048331
A	TOG_RUNL	0.170512	0.364405	0.336782	0.340289	0.429696	0.143744	0.071507	0.000284	0.181965	0.004928	1.487321	0.053902	0.535482
A	TOG_STRE)	0.129977	0.168749	0.200041	0.218155	0.047875	0.024915	0.045336	2.49E-06	0.083906	0.01014	2.04481	0.039442	0.081274

FleetMixLa	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment	0.591953	0.053004	0.176619	0.106733	0.020956	0.005303	0.013483	0.022364	0.001589	0.001248	0.005076	0.00092	0.000752
Enclosed P	0.591953	0.053004	0.176619	0.106733	0.020956	0.005303	0.013483	0.022364	0.001589	0.001248	0.005076	0.00092	0.000752
Strip Mall	0.591953	0.053004	0.176619	0.106733	0.020956	0.005303	0.013483	0.022364	0.001589	0.001248	0.005076	0.00092	0.000752

FleetMixLa	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartment	0.595423	0.053963	0.1714	0.106522	0.021043	0.005556	0.013639	0.023425	0.001443	0.001178	0.00478	0.0009	0.000728
Enclosed P	0.595423	0.053963	0.1714	0.106522	0.021043	0.005556	0.013639	0.023425	0.001443	0.001178	0.00478	0.0009	0.000728
Strip Mall	0.595423	0.053963	0.1714	0.106522	0.021043	0.005556	0.013639	0.023425	0.001443	0.001178	0.00478	0.0009	0.000728

PhaseName	WorkerTrip Number	VendorTripNumber	HaulingTrip Number	WorkerTripLength	VendorTripLength	HaulingTripLength	WorkerVehicleClass	VendorVehicleClass	HaulingVehicleClass	Worker VMT	Vendor VMT	Hauling VMT
Demolition	110	0	886	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1188	0	17720
Site Preparation	110	0	8250	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1188	0	165000
Grading	855	0	6600	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9234	0	132000
Trenching	225	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	2430	0	0
Building Construction	170066	37558	6000	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1836713	274173.4	120000
Architectural Coating	24705	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	266814	0	0
Paving	432	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	4665.6	0	0

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2
Category						g					g
Hauling	19621.89	1257671.42	313228.24	5062.184	6642.52	52439.62	59082.1	6642.52	25195.86	31838.38	553334722.7
Vendor	17397.41	786745.40	252703.1	3114.363	4189.37	36006.67	40196.0	4189.37	16691.76	20881.13	335829598.7
Worker	1779005.89	76416.81	1318730.7	4701.316	32427.71	97258.97	129686.7	32427.71	39776.21	72203.92	460965604.6
Total (g)	1816025.18	2120833.622	1884662.1	12877.86243	43259.60222	185705.2529	228964.86	43259.60222	81663.83245	124923.4347	1350129926
Total (lbs)	4003.65	4675.64	4154.97	28.39	95.37	409.4	504.78	95.37	180.04	275.41	2976526.977
Total (tons)	2.0018	2.338	2.077	0.014	0.048	0.2047	0.2524	0.0477	0.090	0.138	1488.26
Total (MT)											1350.13